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THE
CANADA MEDICAL RECORD:

A Monthly Journal of Medicine and Surgery.

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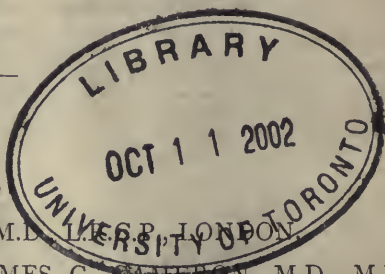
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A CASE OF OVARIAN TUMOR—RECOVERY AFTER ACCIDENTAL BURSTING OF THE TUMOR.

By

J. B. McCONNELL, M.D., Professor of Botany Medical Faculty University of Bishop's College, attending Physician to the Montreal Dispensary, Women's Hospital, &c.

(Read before the Medico-Chirurgical Society of Montreal, on 30th Sept., 1881.)

Madame G., aged 42, came under my notice at the Montreal Dispensary in April, 1880: she is of medium stature, dark-complexioned, and has generally enjoyed good health; is married, and the mother of fifteen children, of whom three only are alive. The last child was born about five years ago; her confinements were not attended with any unusual difficulties; she was unable to nurse any of her children.

She stated that during the previous two years she had suffered from pains in her sides and back, had leucorrhœa, and was constipated, and noticed that the abdomen was enlarged; menstruation oc-

curred every three weeks, and the flow lasted eight or nine days.

Her physical condition then was as follows: she was somewhat emaciated, face wore an anxious expression, eyes were sunken, the facial appearance affording a good illustration of the *Facies Ovariana* of Wells. She had a fair appetite, and the bowels were slightly constipated. On inspection the abdomen appeared uniformly enlarged, the increase in size being about equal to that observed in the seventh month of pregnancy.

Percussion gave a dull sound over the lower and central portion of the abdomen and as high as about two inches above the umbilicus. A soft fluctuating tumor, pyriform in shape, could be recognized with the hands; the fluctuation could be distinguished equally in all directions. It was possible to push the tumor from one side to the other, and it could be felt distinctly sliding beneath the hands. Through the vagina the uterus was discovered to be enlarged, soft and tender, the speculum revealed the os much swollen and denuded of epithelium; there was considerable leucorrhœal discharge; the uterine sound entered two and a half inches. Moving the tumor about caused the uterus to change its position.

The patient was examined by several of the

attending physicians of the Dispensary and by Dr. Kennedy, one of the consulting physicians, the latter unhesitatingly coinciding with the diagnosis—*Monocystic Ovarian Tumor*. Treatment was directed to restoring her strength, simple tonics were given, and astringent vaginal injections used, with an occasional application of nitrate of silver.

In about five months from the time she first presented herself the abrasion of the os uteri was healed, and the leucorrhœa had almost ceased, menstruation was more regular, and the flow considerably diminished, lasting only three or four days, and her general health had greatly improved. The tumor during this time was, from month to month, perceptibly increasing in dimensions. The question of extirpation of the tumor being placed before her, she decided after a time to submit to the operation, and the month of January last was the time which suited her convenience best. In the meantime endeavors were made to increase her strength and bring her into the best possible condition for the anticipated operation.

Through sickness I was unable to attend to my usual duties from about the middle of December to the 1st February; about the middle of the latter month the patient presented herself at my office, but, to my surprise, minus the tumor. I then learned from her the following circumstances: On the evening of the 31st December, 1880, while walking, she slipped and fell down, falling on the buttocks. She arose immediately, and felt no great injury from the fall; a little further on she again slipped, but this time managed to keep from falling. The sudden strain, however, was quickly followed by severe, sharp pain in the right side; almost immediately it extended all over the abdomen, the suffering being so acute that it was with the utmost difficulty that the erect posture could be maintained. She endeavored to walk home, nearly a quarter of a mile distant. While walking she states that she felt as if water was moving about in her inside; she managed to reach home, and did not retire until midnight. She did not observe then that there was any diminution in the size of the abdomen; she suffered excruciating pain all night, did not sleep any, and felt a smothering, oppressive sensation. The pain over the entire abdomen continued severe all the next day; she had also frequent attacks of shivering and the extremities were cold, could not get herself warmed, did not take

anything nor make any application to relieve herself, and remained up all day. During the day the bowels were moved over a dozen times, the passages consisting almost entirely of water; she urinated more frequently than usual, and passed large quantities of light-colored urine.

Towards evening the pain abated and the coldness disappeared, she retired early, and slept all night, and did not feel at all feverish. In the morning, which was the third day after the accident, a friend coming in recommended her to have a bandage put on, and it was not until this was being applied that she noticed that the tumor had subsided. The pain, although more moderate, continued all day, and the smothering and oppression was still complained of. There was considerable tenderness over the abdomen, so that she could scarcely bear the weight of her clothes, and any pressure produced great pain. She did not remain in bed this day, nor even in the house, but drove from her home on Montcalm street to the Hotel Dieu, to see her husband who was there. There was no return of the chills and the diarrhœa and diuresis had ceased. The pain and tenderness in the abdomen continued for about three weeks after this, during which time she went around and out as usual.

I examined her at this time (15th February), and found that the tumor had entirely disappeared. There was considerable tenderness on pressure about the region of the ovaries and fundus of the uterus. A small irregular-shaped mass could be felt in the right iliac region, but the tenderness rendered it impossible to make a close examination. I placed her upon a mixture containing potassii iodidum and bitter infusion, which she continued to take for a couple of months. I saw her again three days ago (Sept. 28th): she has been enjoying much better health than formerly; menstruation has been regular, the discharge lasting only two or three days, and slight in quantity. She suffers from a more or less constant pain in the left side, in the region mid-way between the crest of the ilium and the ribs; there has not been any leucorrhœa until about six weeks ago, since which time there has been a slight discharge. The womb to the finger feels harder, and is larger than normal, and tender to the touch; there is still slight pain on pressure in the region of both ovaries and more in the left. Otherwise she is in perfect health and has regained her previous strength and normal appearance.

Although a number of cases are on record of the bursting of ovarian tumors and resorption of the fluid from the peritoneum, followed by cure, I am not aware that this happy termination is of very common occurrence, hence my reason for bringing the present case before the notice of this Society, although the report is somewhat imperfect, having to depend on the patient's own description of what occurred at the time of the accident.

The result in this case is somewhat remarkable, considering the treatment she had at the time the rupture occurred, having, without any special care or medical aid, run the gauntlet of shock, peritonitis, hemorrhage, etc., in safety.

IODOFORM.

By HENRY R. GRAY, Montreal.

Iodoform C. H. I_3 (an analogue of chloroform C. H. Cl_3) is made by mixing in a retort 2 parts of pot. carb., 2 parts of iodine, 1 part of alcohol and 5 parts of water, heating until colorless, pouring into a beaker and allowing to settle. The yellow deposit is then collected on a filter, washed with water and dried. A proportion of iodine remains in the mother liquor. By Filhol's process the iodine is liberated by means of chlorine. In this preparation 3 atoms of iodine occupies the place of the 3 atoms of chlorine in chloroform. Iodoform is in lemon-yellow scale-like crystals, of a peculiar penetrating odor and sweetish taste. It is readily soluble in ether, chloroform, bisulphide of carbon, wood naphtha, fixed and volatile oils, and in the proportion of 1 in 80 in alcohol. It is insoluble in water. A test of purity is the complete solution of one part in 80 parts of alcohol. On heating it is decomposed into iodine and hydriodic acid.

The great objection to the use of this valuable therapeutic agent is its very penetrating and tenacious odor, and this objection is almost insurmountable in cases of a delicate nature, where the patient naturally wishes to conceal the fact of being under medical treatment. Numerous substances have been recommended by different authorities to overcome this difficulty, but everything as yet tried by the writer has failed in toto. The oils of peppermint, cloves, lavender and fennel, Peruvian balsam, storax, menthol, thymol, tonquin bean, and vanilla have each had their advocates, and probably have still. One writer states that tannin

destroys the odor of iodoform, a statement without any foundation whatever.

The probability is that nothing will destroy the odor of iodoform without changing its chemical composition.

Therapeutically it is an excellent local anodyne and absorbent, with powerful resolvent action, especially in cancer. Cancroid tumors supposed to be cancers have been entirely cured by it, says Stillé & Marsch in their Dispensatory. Sydney Ringer says iodoform is a healing and easing application to spreading and sloughing sores and soft chancres.

Other authors extol it highly for the relief of pain, and through that for allaying the congestive and inflammatory processes upon which pain so often depends.

It has been particularly useful in buboes that have become open sores. In some forms of throat irritation, diluted with tannin, it is much employed. Iodoformed collodion is applied locally in neuralgia. In most forms of ulceration, including ulceration of the vagina and uterus, and in post-nasal catarrh it has been successfully used.

The physiological action of iodoform after absorption is very like that of iodine with some hitherto unexplained peculiarities. It can be detected in the urine after internal or external use. The *Pharmaceutical Journal* of London says: "On shaking tincture of iodine with a piece of fused caustic potassa, the resulting colorless liquid assumes the characteristic odor of iodoform. In this simple form the liquid possesses a high therapeutic effect, particularly for healing indolent ulcers where iodoform is found useful. * * * Lint dipped into the solution and afterwards allowed to dry is an excellent dressing for sores."

On ulcers and venereal sores previously cleaned and dried iodoform may, when finely powdered, be lightly dusted, a piece of dry lint being laid over it, and the dressing renewed night and morning while the discharge is profuse; afterwards once daily. Tannin, French chalk, or fuller's earth may be mixed with it in any proportion to modify its action when necessary. Sydney Ringer says it should not be applied to inflamed tissues as it will increase the inflammation. A mild ointment, however, does not appear to be open to this objection. The usual strength of iodoform ointment is 3 j to the ounce of vaseline, to which any perfume may be added at the option of the prescriber. Iodoformed collodion may be made as follows: Iodo-

form finely powdered 3 ss; bals. Peruv. 3 ss; sapo mollis 3 ss; collodion flexile ad 3 j. After application with a camel's hair pencil the part is covered with gutta percha tissue. It has in this form been found of service in neuralgia and gout, as a local anæsthetic. A solution of one part of iodoform in from six to twelve parts of pure ether makes an efficient application in some forms of ulceration. The ether evaporates quickly, leaving behind a film of iodoform. The evaporation of the solvent is apt to produce pain in sensitive parts.

Iodoform in cod liver oil has been used in phthisis and scrofula, and authorities are not wanting who speak highly of it. It may also be prescribed in the form of sugar-coated pills. The pills are usually met with of the strength of one grain. The dose for internal administration is from one to three grains 3 times daily. The larger dose frequently produces disagreeable symptoms, the toxic effects of iodine having been produced with doses of half a grain twice daily. Iodoform pencils have been used in England and France with great success in superficial ulceration of the vagina and uterus. The formula for these pencils is as follows: Iodoform in fine powder, ten grammes; powdered gum acacia, five decigrammes; mucilage q. s. Divide into 10 equal cylinders of the required length. These pencils are firm, resisting, and capable of being divided into pieces of any length. They are introduced into the cavity and allowed to remain, being kept *in situ* by a plug of wadding. Compound iodoform ointment, made as follows, has been highly extolled in prurigo: Iodoform 3 j; balsam of Peru 3 ij; powdered ext. of opium 10 grains; vaseline 3 vi. Iodoform suppositories may be made in the usual way with cocoa butter.

NITRO-GLYCERINE.

By HENRY R. GRAY,

Chemist, Member Board Examiners and Member of Council Pharmaceutical Association.

Nitro-glycerine, $C_3H_5(NO_2)_3O_3$ —molecular weight 227—was discovered in 1847 by Sobrero, and forms the basis of various blasting compounds. It is a colorless or pale yellowish oily liquid, sp. gr. 1.60 at 60° F. Crystallizable at a low temperature. Burns quietly when ignited in the open air. When heated in closed vessels, or by percussion, it explodes with great violence. It is free from odor, but its vapors produce intense headache. Its taste is sweet. Nearly insoluble

in water, freely in alcohol, ether and naphtha. It is prepared as follows: To about 7 pounds of a mixture, composed of one part nitric acid and two parts sulphuric acid, one pound of glycerine is slowly added with frequent stirring, and with the precaution of preventing the temperature from rising above 26.6° C. (80°F).

The mixture is then poured into a large quantity of water, and the oily sediment well washed with a diluted solution of alkali and water.

Nitro-glycerine was introduced into medicine as far back as 1858, for spasmodic affections, epilepsy, &c., under the name of "glonoine" by the homœopaths. During the last two years it has been used with great success by allopathic practitioners in cases of angina pectoris, neuralgic affections, and to increase the secretion of urine. An alcoholic solution of one per cent. strength has been mostly used. The usual dose of this solution is one minim in any suitable vehicle. As much as four minims is sometimes prescribed and repeated every four hours. A convenient method of administering this remedy is in the form of sugar-coated pills in doses of 1/50 and 1/100th of a grain.

Its therapeutic action in a complicated case of Bright's disease, especially its effect in increasing the flow of urine, has been very fully reported in a previous number of this Journal by Dr. Cameron.

Progress of Medical Science.

THE ALUM PLUG IN UTERINE HEMORRHAGE.

The speedy method of arresting uterine hemorrhage by placing a lump of crystal of alum in the vagina, originated with Professor R. Beverley Cole of this city. As long ago as 1860 he drew the attention of the profession to its merits. The article describing its mode of application, etc., may be found in the *San Francisco Medical Press* for January, 1860, and in the *American Medico-Chirurgical Review* for July, 1860. It is also summarized in the New Sydenham Society's Year Book of Medicine for 1861.

In the *Louisville Medical News* of April 3rd, there appears a glowing eulogy of the alum plug, from the pen of Dr. R. W. Griswold of Rocky Hill, Connecticut; who, while laying no claim to the invention himself, does not know to whom it should be credited. He says:

And this brings me to the point of speaking of my own method of treatment—viz.: the introduc-

tion of the *alum egg*.....For the last twenty years my reliance has been on a junk of alum in the vagina. If this is not at hand I take the next best thing that is; but a junk of alum is a part of the contents of my medicine box. It is of the size of a large hen's egg, ovoid in shape, and generally left a little ragged, though without sharp points. Around the middle is cut a groove, about which is tied a bit of strong but not large twine, leaving the ends so that they can hang out of the vagina.....This treatment is easy, speedy, and effectual against further hemorrhage. It has never failed me, and I leave a patient with the feeling that she is safe for the next twelve or fifteen hours, so far as danger from further bleeding is concerned. And I may add that I have never had any unfavorable effects follow its use in any one of the scores of cases in which it has been employed—no fevers, no septiemia, no deaths, no anything untoward—and I have never had occasion to use it the second time in any one case.—*Western Lancet, San Francisco.*

REMARKS ON THE DIAGNOSIS AND TREATMENT OF PRURITUS VULVÆ.

A Clinical Lecture delivered at St. Mary's Hospital.

BY ALFRED WILTSHIRE, M.D., F.R.C.P., Joint Lecturer on Obstetric Medicine at the Hospital.

GENTLEMEN:—The patient, an elderly woman who is now before you, has brought this specimen of her urine at my request; our object in procuring it being the demonstration to you that it contains sugar. Its specific gravity is high—1040; and, on applying Fehling's test with heat, you may observe that a copious precipitate of suboxide of copper is thrown down. We conclude, therefore, that it contains sugar—the influence of any other reducing agent, *e.g.*, uric acid, being excluded.

Looking at the patient, probably a few of you would suspect that she is diabetic: she is neither notably thin, nor has she had, until recently, either thirst or a large appetite; moreover, the amount of urine voided when she first attended was not remarkable: now it averages seven or eight pints in the twenty-four hours. We were led to suspect the presence of sugar in the urine from her complaint of itching of the private parts, the symptom for which she sought relief; and at each visit we have found it to be loaded with sugar. The vulvar itching was at once greatly relieved by a borax lotion; and although there is no abatement of the glycosuria, yet the itching has scarcely troubled her again; in fact, she now makes no complaint of it.

I have availed myself of this case as illustrating an important form of pruritus vulvæ due to a general disease of great gravity, the first clue to which is sometimes obtainable through the symptom of vulvar itching long before the manifestations of diabetes commonly regarded as classical, *e.g.*, wasting, thirst, voracious appetite, polyuria,

etc.—have declared themselves. This symptom of pudendal itching—for males, though in a less degree, are subject to it—has repeatedly led me to the discovery of glycosuria. Observe that I use the word glycosuria rather than diabetes; for not all the patients whose urine contains sugar are diabetics, that is, they do not all have an excessive flow of urine, polyuria being manifested later if at all. Clinically, it is important to recognize that glycosuria occurs in stout as well as in thin folk; otherwise the malady may be long overlooked. The symptom of pudendal itching will direct your attention to the state of the urine, and may thus lead to the early detection of sugar. Before dismissing the patient, I will ask you to observe her teeth, and note the injection of the capillaries of her cheeks. Her teeth are being shed without decay, as the teeth of elderly diabetics sometimes are, apparently from the shrinking of the sockets, the alveolar processes wasting. In some cases, the teeth become brittle and crumbly. The tendency to injection of the facial vessels seems to be part of a general proclivity to capillary erethism, for flushing of other regions of her skin is easily excited. Here is a photograph of another patient who was tormented with vulvular pruritus, a stout gouty diabetic; and, as the local condition in her case was typical, I will describe it.

The separated vulva looked pale, rough, granular, thickened, and sodden—in texture like the rind of a Seville orange, only dead white. Mark the absence of pigment: it is diminished or absent in many cases, just as in pruritus ani. This change I regard as neural. Very rarely there is increased pigmentations, a slaty hue overspreading the parts; or there may be suffused dusky redness, or a glazy redness, especially in the aged, mostly arising from acrid uterine discharges.

But the glycosuric or diabetic is only one of many forms of pruritus vulvæ: and, as the symptoms may arise from a variety of causes, we must review these together, in order that you may acquire a comprehensive knowledge of them. Broadly, they may be divided into two chief classes, the *local* and the *general*; but in some instances these overlap.

Local Causes.—These are as follows:—

a. Animal and vegetable parasites may infest the vulva, and excite itching. Among the former are pediculi, acari, and ascarides. Pediculi and ascarides are easily recognized, but the itch insect may be overlooked. Ascarides are more common in girls than in women, but are by no means unfrequent in the latter. They crawl from the anus over the vulva, and thus annoy; sometimes provoking leucorrhœa also. (The same may be said of tænia, joints of tapeworm escaping *per anum* and exciting irritation in the adjacent parts; but this very rarely happens.) The vegetable parasites are of interest; for the itching appears in many cases immediately to depend upon the presence of certain low varieties, not only in the glycosuric cases, but also, it appears to me, in other instances,

in which loss of pigment points to neurosal impairment. The *oidium albicans* (the thrush-fungus) has been met with, and also other low forms of vegetable life, as Friedreich, Hausmann, and others have observed. Sugary urine obviously supplies a most favorable pabulum for the development of lowly organized fungi. It is interesting in this connection to note that most of the successful remedies are parasitocides, as we shall see when discussing treatment. Parts whose innervation are impaired afford, as you are aware, a favorable nidus for the development of low forms of parasitic life, both animal and vegetable; and the flourishing of such organisms in the parts in question may be regarded as evidence of neurosal impairment, indicated, furthermore, by the occasional presence of leucoderma.

Among local causes, we have, further, several important affections, *e. g.*—

b. Diseases of the vulva (as vulvitis, abscess, carcinoma, oozing tumor, lupus, elephantiasis, etc.);

c. Diseases of the urinary system (urethra, bladder, and kidneys);

d. Vaginitis—gonorrhoeal and other.

e. Diseases of the uterus (metritis, endometritis, senile catarrh, cancer, fibroids, polypi; acrid discharges arising from some of the foregoing, or occurring mainly in association with menstruation);

f. Ovarian and other tumors, and pelvic effusions;

g. Skin-affections—eczema, ecthyma, herpes, urticaria, acne, etc.

As regards the latter, eczema may be associated with diabetes, producing terrible suffering; while urticaria suggests ovarian disease. Ecthymatous spots, with ashen-gray bases, may indicate grave cachexy (? syphilitic); while the herpetic vesicles are prone to crop out periodically in females of gouty parentage just before each menstrual period. The French attribute this to the herpetic diathesis. A pustular form of acne is sometimes accompanied by troublesome itching.

It is perhaps true as a broad generalization, that syphilitic eruptions are not prone to itch; but I have met with marked exceptions to this in some syphilitic affections of the vulva, as in the patient of whom I show you a photograph illustrating elephantiasis of the clitoris and vulva, from whom I removed an hypertrophied clitoris weighing a pound and a quarter. Venereal warts may excite itching.

Malignant disease of the uterus and upper part of the vagina may provoke itching in two ways: first by acrid discharges; and, secondly, reflexly—the latter uncommonly. The same may be said of fibroids, polypi, sarcomata, etc. I have known pruritus to exist for a long time apparently as a consequence of pelvic effusions—*e. g.*, hæmatocele, cellulitis, partly perhaps from venous obstruction, and partly from implication of nervous structures. Some discharges from the interior of the womb are virulently acrid, and excite excoriation of the parts

over which they flow. These are revealed by the speculum.

Urethral and vesical affections—*e. g.*, vascular growths, stone, incontinence, etc.—are sometimes complicated by vulvar itching. Careful local investigation, therefore, is obviously necessary in all such instances; and even when the predisposing cause is general, as in diabetes, the local condition may be significant and important, yielding, as has already been pointed out, valuable information.

General Causes.—Among the general causes of pruritus vulvæ, we find: (*a*) diabetes (glycosuria), (*b*) pregnancy, (*c*) gout (or lithiasis), (*d*) syphilis, (*e*) prurigo senilis, and perhaps (*f*) the dartrous diathesis of the French. (Diphtheria must be mentioned as an extremely rare cause.)

a. The patient whom you have seen is now a type of the diabetic causes. Such are not uncommon; but they usually escape detection until other symptoms obtrude themselves. I have shown you and met with many such; although usually among the middle-aged or elderly, yet also in patients under twenty, as in the case of a young woman who was under my care some years ago. She consulted me for severe pruritus vulvæ; and on examination, I found extensive eczema. I at once examined her urine, and found sugar. She had then no other symptom indicative of diabetes, nor did she present any for many months; but she ultimately died of it; and I believe her brain is figured in Dr. Dickinson's able work on diabetes. We have had other cases here, as you know, notably one in which diabetes came on rapidly after severe mental trouble; the vulvar pruritus alone leading to its detection.

b. Pregnant women are liable to a severe form of pruritus vulvæ. It is usually accompanied by an irritating discharge—whitish, creamy, or yellow in color, and occasionally very abundant. Sometimes aphthæ and erosions are seen upon the turgid labia or cervix, or there may be vaginitis granulosa. Most of the cases that I have seen have been accompanied by extreme venous turgescence. The distress experienced by some sufferers appears to be painfully augmented by the exalted nervous tension attending pregnancy. Parturient women seldom make complaint of pruritus; but I have seen a few instances in which it occurred, and it has been associated with hydroa or herpes gestationis.

c. The gouty form is not uncommon, but, fortunately, it is seldom intense or obstinate, unless complicated with glycosuria. It may be seen in plethoric women, even when young, recurring before menstruation, when the urine is apt to be loaded with lithates. Sedentary habits, beer, and strong wines, aggravate it. Stout gouty women at the change of life are prone to suffer from vulvar irritation; some, doubtless, are examples of gouty glycosuria, in whom climacteric disturbance intensifies the mischief. Ordinarily indulgence in the pleasures of the table provokes itching, while abstinence alleviates. Obese elderly women are

liable to vulvar irritation, the secretions of the parts apparently possessing very irritating properties; but you will be amply repaid for your trouble by systematically examining their urine for sugar, for thus you may be enabled to detect latent diabetes.

d. As regards syphilis, it is seldom that the early or acuter manifestations of the disease excite itching. It is associated rather with later phenomena, as in the case of elephantiasis already mentioned; but chancres and venereal warts may provoke much irritation.

e. Sometimes intractable pruritus vulvæ appears to be part of a general affection, the so-called prurigo senilis, and is associated with general cutaneous hyperæsthesia. Klob says that there are little elevations of the skin, like goose-flesh, consisting of growths analogous to tubercular formations, and giving rise to violent itching. These cases are grave. Some are amenable to the bromides, which are advocated by Gueneau de Mussy, in the form of lotion or ointment, as well as internally. Arsenic and cod-liver oil are also indicated. Such cases are not to be confounded with senile pruritus arising, as commonly happens, from phtheiriæsis.

f. A tendency to pudendal itching seems to prevail in those who have what the French call the dartrous diathesis. In them, fissuring of the affected parts is often observed, the skin presenting a glazy, cracked appearance. Renal disorder, notably oxaluria and inadequacy, may be associated with this condition.

All forms of pruritus vulvæ are subject to periodical exacerbation. Some patients suffer only at night, after becoming warm in bed, experiencing comparative freedom during the day. All who menstruate are conscious of aggravation at that time. Stimulants, as a rule, exert an injurious effect. Sedentary occupations aggravate pruritus; governesses and seamstresses, for instance, suffering much, as also do those who work treadle sewing machines. Piles and hepatic disorders generally are conspicuous.

Treatment.—While in many cases vulvar itching readily yields to treatment, in others it proves obstinate and intractable, taxing our therapeutical resources to the utmost. Here, as in other affections, a clear diagnosis as regards causation is generally essential for successful treatment. It is obvious that a symptom owning so many and varied causes cannot be appropriately treated in a routine manner; search must be made into the origin of each case, and treatment based upon the knowledge thus acquired.

Attention to cleanliness will often do much to allay irritation, and should always be enjoined. Demulcent washes are preferable to soap, unless carbolic or coal-tar soap be used, and usually even these are inadmissible. Almond-meal, strong bran-water, decoction of rice, marsh-mallow, slippery elm, of fine oatmeal, are suitable, especially the first, which, if pure, yields during use a marked odor of hydrocyanic acid, and appears to soothe materially.

The prohibition of friction may be required, some afflicted sufferers finding transient relief only during scratching, which may be indulged in to an extent involving serious consequences. Relief may be so frequently sought in this manner, as to exclude sufferers from society, and even from the family circle; while other regrettable results, moral as well as physical, may ensue.

When pruritus is due to acari or pediculi, ointment of sulphur, white precipitate, or stavesacre speedily cures, by destroying the insects and their ova. If nits persist about the pubichairs, a lotion containing bichloride of mercury and acetic acid will dissolve them. Ascarides are destroyed by a carbolic lotion (1 in 60); but general, rather than local, treatment should be relied on for their eradication—iron, quinine, cod-liver oil, together with enemata of hamamelis, lime-water, iron, etc.

The vegetable parasites are very efficiently treated by unirritating parasitocides, *e. g.*, borax, boracic acid, sulphurous acid, etc. Here I would again emphasize the fact that most of the favorite remedies for vulvar pruritus are parasitocides. It suggests that—whether from the sugary pabulum provided by diabetic urine, or from alteration in the nutrition of the parts from neurosial impairment, or from a combination of the two, when coincident—the immediate exciting cause of pruritus is, in numerous instances, the growth upon the implicated parts of low forms of vegetable growth.

Friedreich (*Virchow's Archiv*, Band 30, p. 476) alleges that the pruritus is due to the development of fungous organisms, and my own observations are certainly confirmatory of this view. It is a curious clinical fact, that patients are often freed for days from itching by a single application of a parasiticide; I have observed this repeatedly in glycosuric cases, after the use of a strong borax lotion. It is best to use such remedies in a fluid form, for, when necessary, powerful combinations may thus be made in the unhappily intractable cases. In my experience, fatty preparations of drugs do not suit so well for local application as non-fatty; and yet great relief may be afforded by some ointments, as we shall see presently.

Many cases of pruritus vulvæ are promptly relieved by a borax lotion, and it is well to use this simple and efficacious remedy where not contra-indicated. A drachm to five ounces of warm water is a good standard strength, but a stronger solution is usually needed, seldom a weaker. Hydrocyanic acid may be added—say $\frac{3}{4}$ of the dilute acid to $\frac{3}{4}$ x, or morphia (gr. ij), atropia (gr. $\frac{1}{2}$), aconitia (gr. $\frac{1}{2}$), or veratria (gr. $\frac{1}{2}$). Infusion of tobacco (half an ounce to the pint) alone relieves some cases, and forms a good vehicle for borax or boracic acid. It is not well to use glycerine with the borax as a rule, as it is apt, owing to its affinity for water, to aggravate the irritation. Some find relief from chloral lotions, but the drug has not always suited. Strong decoction of poppy is a soothing vehicle for borax, etc. Ice alone will

relieve some ; while others can get relief only from the use of very hot water. In excessively severe cases, the ether-spray might be tried.

Boracic acid is an excellent remedy ; but, being much less soluble in water than borax, is not so handy as a lotion. It may be combined with hydrocyanic acid, morphia, atropia, aconitia, veratria, etc. In the form of ointment, where fats do not disagree, it often soothes greatly. A non-rancid fat should alone be employed as the vehicle, *e. g.*, freshly made spermaceti cerate, vaseline, fossiline, or purified benzoated lard, etc.

Lotions of iodine occasionally answer, *e. g.*, two drachms of iodine in ten ounces of elder flower water. Electricity may afford relief in neurosal cases. Probably faradism would be the preferable form.

In simple vulvitis, lead, borax, or carbolic lotions relieve. An ointment of calomel or bismuth is also good. Malignant affection of the parts calls for appropriate treatment, such as ablation, where practicable ; but sedative applications (conium, opium, belladonna) alone are often all that we can employ.

Urethral caruncles should be removed ; and urethritis, gonorrhœal or other, treated *in loco*. Cystitis, stone, and kindred vesical affections and renal diseases, must be treated according to their several indications. Success is unattainable if they be overlooked. Vaginitis, gonorrhœal or otherwise, demands thorough treatment. The packing of the upper part of the vagina with a tampon soaked in glycerine, with carbolic acid, lead, tannin, chloride of zinc, or borax, seems the most prompt method of cure ; but injections of these agents may suffice, and may be preferable. When the itching is associated with chronic metritis, iodized tampons are useful ; and so are copious irrigations of the parts with warm water.

When vulvar irritation arises from acrid discharges proceeding from the uterine cervix or cavity, the use of a tampon filling the top of the vagina is most efficient. Cotton-wool, iodized or carbolic, answers well. As glycerine is apt to excite watery flux, it is not always admissible, but may now and then be required. Absorbent wool, dusted with iodoform, boracic acid, morphia, tannin, camphor, chloral, and such like, may be packed against the cervix uteri, so as to arrest and disinfect virulent discharges ; the choice of drug being guided by the form of disease present. It is necessary to attach a string to each tampon to facilitate its withdrawal. Vaginal and pudendal pruritus, arising from acrid uterine discharge, is mostly seen in elderly women, and may be accompanied merely by glazy redness around the ostium vaginæ. Search for uterine discharge may, therefore, be necessary. I have seen it in cancer of the fundus uteri, as well as in senile catarrh.

Local treatment by the tampon may be demanded in malignant disease of the uterus, and also in fibroids and polypi when accompanied by irritating discharge, *e. g.*, in disintegrating calcified

growths. Removal of the diseased structures is preferable where practicable ; and the same may be said of cases dependent upon ovarian growths. Urticarious itching is the form of pudendal irritation mostly seen in association with ovarian tumors. A lotion of bicarbonate of soda, or one of borax with hydrocyanic acid, generally relieves. Magnesia internally is useful. When there is previous turgescence of the vessels of the part, as may be seen from stasis in some pelvic effusions, relief is afforded by the watery flux provoked by the presence of a well-soaked glycerine tampon ; and a mercurial and saline purge is helpful when portal congestion is present. Eczema—often symptomatic of glycosuria, remember—may be very obstinate. Dusting freely with fine oxide of zinc answers well when ichorous weeping is abundant. If fissure be present, a poultice formed of the clot resulting from the addition of two drachms of liquor plumbi to ten ounces of new milk is most useful. Sometimes calomel ointment will alone relieve, as in certain instances of anal mischief ; or bismuth may answer, dry or otherwise. Mercurial ointment suits certain cases excellently.

Angry ectymatous spots appear to yield only to calomel, either dry, or in the form of ointment or of black wash. Opium is a valuable adjunct, both internally as well as externally.

Herpetic eruptions are benefited by a small mercurial dose followed by a saline purge, as the effervescent sulphate of soda, and the local use of borax lotion. If they be very severe, hydrocyanic acid and other local sedatives may be necessary ; but it must be borne in mind that these herpetic manifestations generally run a definite course, the vesicles dying away completely. They are often accompanied by lithiasis, and may excite preputial herpes in the male.

It is unnecessary for me to dilate further on the importance of recognizing diabetes as a cause of pruritus vulvæ. When the parent disease is discovered, those restraints upon diet, drink, etc., which observation and experience have taught us to be necessary, should be strictly enjoined. Unhappily, we have no cure for confirmed diabetes, but much may be done by judicious treatment and management, alike for those who are threatened with glycosuria, as for advanced cases. Immense comfort may be secured by the habitual use of cleansing ablutions, and of borax or boracic acid.

Gouty diabetics may experience much benefit from a course of the Bath waters and baths, or from those of Carlsbad, as I have seen there ; but I doubt whether confirmed and advanced diabetics are so relieved. The insomnia of diabetic pruritus vulvæ sometimes shows a gratifying amenability to codeia, in the form of one-grain doses in till. The bromides are also useful as hypnotics.

The distress that pregnant women sometimes experience, especially towards the latter months, may be terrible. When associated with aphthous ulceration, and the *oidium albicans* is present, nothing relieves more quickly than a lotion of sul-

phurous acid. Some prefer the hyposulphites, and in either case prolonged use is undesirable. As sulphurous acid is very volatile, it is best to mix a tablespoonful of the pharmacopoeial solution with half a pint of warm water, barley water, or almond emulsion, freshly for each occasion. Another very useful lotion is formed by two drachms of bicarbonate of potash in half a pint of water. This should also be injected into the vagina; it checks the discharge, often alkaline, which seems to excite irritation. Borax is again a valuable agent, and so is lead.

In some cases, relief is only obtained after treating the cervix uteri; as when aphthous ulceration is seen around the os. Nitrate of silver, lightly used, suffices. Bromide of ammonium internally is highly serviceable. Attention should be paid to the state of the bowels, and to the hepatic and renal secretions, for in many cases elimination is defective. Turkish or hot-air baths exert a better effect over some of these cases than any ordinary treatment, and the same remark applies to certain other varieties of pruritus vulvæ, *e. g.*, those seen in the obese, gouty, and (senile) pruriginous. Jaborandi may prove very helpful under similar circumstances, by producing profuse diaphoresis. Diuretics—juniper, broom, potash, lithia, etc.—are often beneficial as in gouty cases, especially when combined with colchicum. Restrictions as regards meat, beer, and wine, should be imposed on the subjects of lithiasis.

When vulvar pruritus appears to be part of a general prurigo senilis, besides the local applications already indicated, a lotion of bromide of potassium may afford ease, as has been shown by Dr. Gueneau de Mussy. The same drug given internally is helpful, the affection appearing to be part of a general nervous erethism. Arsenic exerts a controlling effect in some instances of senile prurigo, as well as in those due, as the French allege, to the darts diathesis. Arsenic may be said to be indicated in the neurosial forms, and especially when there is marked loss of flesh. It has appeared to me to benefit most those who are the subjects of leucoderma.

It remains only to remark that, in the intractable cases, frequent changes of remedies may be inevitable for the relief of torment. Chloroform locally applied answers; it may be used in the form of vapor, liniment, ointment, or lotion. Bichloride of mercury, also a parasiticide, gives relief to some in the form of a lotion, but it requires caution in its use. Used in the proportion of gr. j to gr. v to $\frac{3}{4}$ viij of mistura amygdalæ, it may afford great relief.

I have no experience of section of the pudic nerve in inveterate cases, nor am I aware that it has ever been practised; but Sir J. Simpson mentions that he once severed the skin from the subjacent structures, with considerable benefit.—*British Medical Journal*, March 5, 1881.

MILK INDIGESTION IN YOUNG CHILDREN:

Dr. Eustace Smith, in an article on this subject in the *British Medical Journal* (vol. i., 1881, p. 877), says that when indigestion is due to catarrh of the stomach it is readily amenable to treatment. All that is necessary is to put a stop to the milk for a day or two, and to clear away the curd by a full dose of castor oil. If, however, the fault be in the milk, and not in the digestive organs of the child, some change in the method of feeding is indispensable. In one case where curdling took place, with resultant griping and indigestion, and where various remedies had failed, Dr. Smith at last adopted the plan of giving the child barley-water from a bottle immediately before he took the breast, in the hope that by this means the milk might be diluted directly it reached the stomach. This method succeeded perfectly, and the child had no further unpleasant symptoms.

In cases of gastric catarrh, when the complaint is acute and severe, vomiting is usually the most prominent symptom. Under such circumstances milk becomes a positive poison, and no hope of alleviating the symptoms can be entertained while this diet is persisted with. In the case of an infant two months old, brought up by hand, and fed upon milk and barley-water, uncontrollable vomiting and diarrhoea had reduced it to the last extremity. Dr. Smith directed a weak mustard poultice to the epigastrium. The milk was stopped, and the child fed with weak veal-broth and thin barley-water, mixed together in equal proportions, and given cold at intervals with a teaspoon. A few drops of brandy were given occasionally, as seemed desirable. As a result of this treatment the vomiting stopped at once, and the child, when seen three days afterwards, was found to be much improved, and was cured by the end of a few days' further treatment. The most important part of the treatment in this case was the substitution of veal-broth for milk. Directly the supply of fermentable matter was stopped, fermentation ceased, acid was no longer formed, and the digestive organs returned to a healthy condition. Here the derangement was acute.

Another case of a chronic character is cited by Dr. Smith, where a little girl ten months old had been fed first with milk, then with farinaceous food, and later with beef-tea. She vomited everything, and was growing extremely emaciated. Such a case is treated, he says, by restricting the diet to equal parts of weak veal-broth and thin barley-water, given cold, in small quantities at a time, by warmth to the belly and extremities, by perfect quiet, and by suitable remedies. The best sedative is Fowler's solution,—half a drop for the dose,—given with a few grains of bicarbonate of sodium in some aromatic water. After a few days of such treatment the power of digesting milk usually returns. But at first it should be given sparingly,

freely diluted with barley-water, and only once or twice in the day.

Looseness of the bowels is a common consequence of milk indigestion. Such cases, seen in the early stage, are sometimes spoken of as cases of "inactive liver," the white stools being supposed to be merely the result of insufficient biliary secretion. Cholagogues are, however, in such cases quite useless. The stools are white, because they consist of curd mixed with the farinaceous matter which is usually given in large quantities at the same time; and their character can only be improved by a complete change of diet. When a chronic diarrhœa is regularly established, the cases are very often called "consumption of the bowels." It is needless to say that they have no relation at all to "consumption," but are purely functional derangement, a chronic catarrh of the bowels, excited and maintained by indigested food.

In another case cited by Dr. Smith, where a child of fourteen months was wasting away with chronic diarrhœa, the diet of milk and sago was changed, and the child was fed instead with whey and cream, veal-broth and barley-water, yolk of eggs, and "Mellin's food" dissolved in barley-water. Iron and arsenic were also administered, and later quinine and cod-liver oil. Dr. Smith does not think well of beef-tea for children, and prefers veal-broth.

WHITLOW.

In a clinical lecture on whitlow (*Medical Times and Gazette*, vol. i., 1881, p. 667) Mr. Christopher Heath says that the subject is meagrely treated of in the text-books. If met with in the earliest stage, when the finger has just begun to redden and tingle, a twenty-grain solution of nitrate of silver, or the silver stick wetted and lightly pencilled over the affected part and a little beyond, checks it at once. When the whitlow is a little more severe,—that is, when pus forms about the nail or the tip of the finger,—the cuticle, which is insensitive, may be incised. Occasionally, however, when a foreign body has found its way beneath the nail, pus forms there and gives rise to excruciating agony from the tension beneath unyielding structures. Judicious cutting of the nail will relieve this if near the margin; but if near to the base, it is much better to pare down to the nail with a sharp knife until the matter is let out than to resort to the unnecessary cruelty of removing the entire nail.

The third kind of whitlow is really an acute necrosis of the terminal phalanx, following periostitis and suppuration beneath the periosteum, just as it does in the case of a long bone. A very slight injury—the prick of a needle or pin—may set it up. After some hours' uneasiness, the pain becomes acute and throbbing, and entirely prevents the patient sleeping. If timely relief is not given, pus will very slowly make its way to the surface of the

finger, but never up the sheath of the tendons, and, when discharged, will leave the greatest part of the phalanx bare and dead behind it. A timely and free incision is the only mode of saving the phalanx, and cannot be resorted to too early; for, if no pus be present, the inflamed periosteum will still be divided with great relief to suffering. The finger should be held firmly on a table, and the surgeon, entering his knife just above the traverse interphalangeal mark in the skin, should cut boldly down to the bone in its whole length from base to apex. When, as so often happens, these cases have been treated domestically with "soap and sugar" and poulticing until the end of the finger is riddled with sinuses, there is nothing to be done except to extract the necrosed phalanx as soon as it is loose and to bring the finger into shape by careful water-dressing applied in strips. The base of the phalanx usually survives, giving a point of attachment to the tendons.

Inflammation of the skin and subcutaneous tissues may occur in any part of the finger. Incisions must here be made with care, so as not to open the theca or sheaths of the tendons, which then invariably slough, and the patient is left with a useless finger. For this reason incisions on each side of the finger are safer than one in the centre, that may unawares let out the tendons, which will look perfectly healthy at the moment, but soon become soddened and softened.

The synovial sheaths of the flexor tendons of the thumb are often, though not always, in direct communication with the synovial membrane of the annular ligament of the wrist, and hence pus is rapidly conducted in this way up to and, if not relieved, into the forearm.

TREATMENT OF TYPHOID FEVER IN CHILDREN.

By M. J. SIMON (Le Concours Medical. L'Union Médicale.)

The treatment of typhoid fever in children differs materially from that adopted in the case of adults. It does not consist in active medication or the employment of a particular remedy, but in a series of indications which should be fulfilled, and which may be stated in the following words: To sustain the strength, quiet or excite the nervous system according to circumstances, and to stimulate the functions of the skin, which are inactive. During the first few days the employment of diluted beverages is clearly indicated; acidulated drinks are to be preferred, since they are refreshing and agreeable to the taste. Such treatment will suffice at the outset, but after four or five days we may commence to administer alcohol. This agent, as is well known, is exciting in certain doses; on the other hand, it is a well recognized fact that in diseases accompanied by high temperature it reduces

the same, and sustains the forces which tend to exhaustion. The form in which the alcohol is administered may vary: brandy, rum, Malaga wine, etc., may be employed indiscriminately, the dose, of course, being cautiously graduated.

During this first stage the child has generally suffered more or less with constipation, but suddenly the scene changes: diarrhoea appears, accompanied by colic, which is sometimes very violent. Emollient fomentations may now be applied to the abdomen, and enemas employed containing two or three drops of laudanum for an infant of five to seven years of age. In most cases we shall soon secure relief of the abdominal pains, and the meteorism disappears after two or three days, sometimes at once. Every third day we may give with advantage a small quantity of some laxative mineral water, not for the purpose of purging the patient, but in order to cleanse out the intestinal canal. Enemata may be administered daily, to which may be added, if desirable, some antiseptic. For the purpose of stimulating the integument and reducing the temperature, the entire body may be sponged with tepid water, to which vinegar may be added. At this point S. makes a slight digression in regard to the employment of cold baths, which he rejects in the treatment of infants; he, however, commends the use of tepid baths, as giving good results, not being accompanied by the discomforts of cold immersions. The patient should be moved to a bed in another chamber, morning and evening, if circumstances will permit; the object of this practice is to prevent the child from being kept constantly in contact with the poison which is engendered. It is desirable to add to this the most absolute silence, a darkened room, and rest which is undisturbed by inopportune visits. The diet should be regulated, but not too greatly restricted: milk and broth should be prescribed for the purpose of sustaining the strength of the patient.

To recapitulate, the treatment of ordinary typhoid fever, developing without unusual complications, consists, directly, in sustaining the vital forces by means of milk, broth, alcohol; and, indirectly, in diminishing the hypersecretion of the intestinal tract and combatting the poison by means of enemata, change of air, etc.

(1.) *Abdominal complications.* These include diarrhoea and severe griping. Absorbent remedies may be employed boldly, and palliatives to a limited extent. We may prescribe a mucilaginous mixture of ten grammes of chalk or four grammes of bism. subnit. in water or sugar. Benefit will also be derived from the administration of enemata of boiled starch, to which may be added four or five drops of laudanum; this dose of opium may be increased according to the tolerance of the patient, but great precaution should always be exercised. Emollient fomentations should be applied to the abdomen; it is possible that the diarrhoea may not cease for four or five days.

(2.) *Thoracic complications.* The most frequent

are general bronchitis and partial congestion of both lungs. Emetics should generally be avoided. Ipecac, kermes and antimony are strictly prohibited; all such agents have no other effect than to depress the strength of the patient, and, indeed, may superinduce a fatal result. We should restrict ourselves to the application of dry cups to the front and back of the chest; this is a very simple remedy, but nevertheless very powerful, and always at hand. By such a procedure we stimulate the cutaneous functions, and cause a salutary revulsive effect. Alcohol should be freely prescribed in doses of twenty to thirty grammes in a mucilaginous drink; if required, a little extract of cinchona may be added. If the dyspnoea is greatly increased, a blister may be at once applied to the chest, and left in place three or four hours, but never longer. This will suffice to irritate the integument, and may be replaced by a bran poultice, which will promote vesication. We should not reject a therapeutic agent of such great value, especially in the infant, for the fear of causing an eschar. It is true that such an accident may very readily be produced in typhoid fever, and in general in cachectic conditions, but it may always be prevented by early removal of the vesicant.

(3.) *Cerebral complications.* These are the least controllable. Chloral may be employed in the dose of one to two grammes (?). If the infant presents symptoms of much excitement an enema may be given containing the yolk of an egg, a gramme of chloral and a gramme of camphor. Bromide of potassium may be administered as a last resort, but only for two or three days in succession.

(4.) *Hemorrhages.* Intestinal hemorrhages, so common in typhoid fever, are rare in the child; more frequently, obstinate epistaxis occurs, and the most successful means of arresting the discharge of blood is the following: A piece of agaric is cut into portions about 1 cm. in size; these are introduced as far as possible into the nasal fossae until the cavities are well filled, and held in place by means of a bandage. It is sometimes necessary to soak the agaric in a solution of per-chloride of iron. In every case tamponing the posterior nares by means of *Belloe's* canula should be rigorously prohibited; such manipulation is indeed very difficult, on account of the restlessness of the child it excites nausea and secures no better results than the above means.

In case of intestinal hemorrhage, two drops of perchloride of iron may be administered every two or three hours, in a little water; if this does not suffice cold drinks may be given, and cold compresses applied to the abdomen. Internally ice may also be administered, grated and mixed with powdered sugar, which is generally very agreeable to the patient.

(5.) *Complications arising from pressure.* These are caused by congestion, leading to the formation of eschars over the parts which support the weight of the body; they occur most frequently over the

sacrum. An attempt should be made to prevent them, which may be most simply accomplished by placing the infant upon an air cushion two-thirds filled; the parts may also be washed carefully with an infusion of fol. juglandis, or with ordinary astringent solutions. In conclusion, we may glance at the grave forms of typhoid fever.

In the ataxo-dynamic forms, characterized by a combination of delirium and prostration, we may at once apply a blister to the back of the neck, which, as soon as it is dry, may be replaced by another; moreover, we may employ the remedies above adopted in cerebral complications. Finally, in adynamic typhoid and zymotic forms we should rely upon tonics and stimulating agents, capable of exciting the functions of the nervous system. If necessary cold baths may be given, which should not be continued more than a few seconds, which will suffice to produce a strong excitant effect; however, this is a means which should never be employed until all others have failed.

ON MORPHIA AND CHLOROFORM COMBINED TO PRODUCE AND MAINTAIN ANESTHESIA.

Alexander Crombie, M.D., Superintendent of the Medical School and Mitford Hospital, Dacca, Bengal, in a paper which he contributes to *The Practitioner*, says:

The practice I believe to be one the importance of which can not be overstated, and which, in my hands, has robbed chloroform almost entirely of its inconveniences and risks. The advantages derived from the combination are, first, the prolongation of the anesthetic effect of the chloroform, once it has been established; and, secondly, the small quantity of chloroform required to keep it up afterward. The first advantage is most conspicuous in operations about the mouth and face. The prolongation of the anesthesia originally induced in this way is often so great as to enable me to perform operations of the first magnitude without being interrupted by the necessity of recommencing the inhalation of chloroform on account of the patient returning to consciousness in the middle of it. The benefit both to the patient and surgeon in these cases is too obvious to require mention.

But the chief benefit lies in the fact that so very small a quantity of chloroform is required to reproduce anesthesia which has been originally induced under the co-operation of the combined drugs, as long as the influence of the narcotic alkaloid continues. My experience is that once complete surgical anesthesia has been so established from half a dram to a dram of chloroform is usually sufficient to keep it up for half or three-quarters of an hour; that is to say, during the whole of the time required for all ordinary

surgical operations. I have thus, I flatter myself, been able to eliminate from my practice most of the risks and complications of an overdose of chloroform. Among the latter I include vomiting, which I rarely see now, as the consequence of performing an operation under chloroform when morphia has been injected under the skin. Vomiting in some cases occurs very early, and often before anesthesia is complete; but in the later stages of an operation or after removal to the ward it is very rare indeed. I therefore invariably use morphia in combination with chloroform in cataract operations; for, although the long continuance of the anesthesia is of no consequence in these cases, the risks of vomiting are more surely avoided.

Last, but certainly not least, chloroform asphyxia has practically ceased to form part of my experience of the dangers of that anesthetic. It is true that during the first five or eight minutes after beginning the inhalation of chloroform, while the stage of excitement yet lasts, even after morphia has been injected under the skin, I not infrequently see the respiratory movements stop in a state of full inspiration. It is easily removed by taking away the chloroform from the face and then giving one or two smart slaps with the open hand over the epigastrium or forcibly depressing the lower ribs. It sometimes constitutes a considerable obstacle to the administration of chloroform when it recurs, as it sometimes does, whenever the inhalation is recommenced. It usually disappears before anesthesia becomes complete, and if watched for and immediately removed is without risk. Very different is the arrest of the function of respiration in a state of expiration, which occurs during deep surgical anesthesia from paralysis of the respiratory centre from the continuous inhalation of large quantities of chloroform. This grave danger has not occurred in my practice since I have made use of the combination of morphia and chloroform I am now advocating, and when the precautions I insist upon have been faithfully carried out. I attribute the immunity from this danger, also, to the small quantity of chloroform I require to give in order to keep up complete anesthesia when it has once been induced under the influence of morphia, and also to the great care I take that the free ingress and egress of air to and from the lungs are never for a moment interrupted.

The common liquor morphiæ hydrochloratis has never in my hands produced the smallest pain or irritation. Then an ordinary hypodermic syringe holds just the quantity of it—twenty minims—which I find to be usually sufficient. Were I practising in Europe I should probably find it necessary to employ a larger quantity of morphia than one-sixth of a grain—say a fourth or a third, which was the quantity used by MM. Labbé and Guyon.

I use for the administration of chloroform a metal cup with perforated bottom, and with a piece cut out of the side for the reception of the

nose. The chloroform is sprinkled on a piece of sponge which occupies the bottom of the cup. The whole fits loosely over the nose, mouth and chin—so loosely that it is impossible for the most careless administrator to prevent the freest admission of air to the nostrils at each inspiration. This is not the case with a folded napkin or towel, which can be tucked closely around the cheeks and under the chin.

I next insist not only on there being nothing tight around the neck and waist, but on the upper part of the abdomen and lower part of the chest being bared; and the person charged with the administration of the chloroform is directed to divide his attention solely between the respiration, which he is thus enabled to watch in the clearest way, and the condition of the sensitiveness of the cornea. The rise and fall of the epigastrium and lower ribs are the best indication that air is entering and leaving the lungs freely.

As soon as possible—that is to say, before there is complete anesthesia—as soon, in fact, as the relaxation of the muscles will admit of it readily, I cause the condyle of the lower jaw to be pushed forward out of the glenoid cavity on to the eminence in front. In other words, I insist on teeth of the lower jaw being brought forward well in front of those of the upper, and retained in that position during the whole duration of the operation. This is easily done by pushing the bone forward by means of the thumbs placed behind the posterior margin of the ramus and angle of the jaw. This movement forward of the lower jaw has the effect of dragging forward the tongue by its root, and at the same time the hyoid bone, in consequence of the attachments to it of the mylo-hyoid, genio-hyoid, genio-hyoglossus, and genio-hyoid muscles. Since I adopted this expedient, in 1873, I have entirely discarded the use of the barbarous tongue forceps. The traction exerted by the displaced lower jaw on hyoid bone and root of the tongue is much more efficient in preventing occlusion of the glottus, by the tongue falling backward during deep anesthesia, than can be effected by forcible traction by forceps applied to its tip. If this displacement of the lower jaw forward is properly carried out there will not be the least stertor or other sound of impeded passage of air to and from the windpipe during a long operation performed in a condition of the deepest insensibility. If that insensibility is produced by the combined use of morphia and chloroform no difficulty will be found in keeping the jaw in that position for any length of time, for the chloroform is only applied to the face at long intervals, during which the administrator has nothing to do but to keep the jaw forward and touch the cornea from time to time, the inhaler lying at one side. Should consciousness partially return the jaw can be kept in position by one hand while the cup is being reapplied for a few seconds to the face. If during the performance of an operation I hear the least noise in the breathing I know that

this traction on the root of the tongue is not being efficiently maintained, and a word of warning to the assistant charged with watching the anesthesia suffices, by directing his attention to it, to restore that free and noiseless respiration upon which I insist throughout every operation.

By these means, by attention to these details, and by the combined subcutaneous use of morphia, asphyxia has practically ceased to form part of my experience of the risks of chloroform as an anesthetic. This I attribute to the small aggregate quantity of chloroform required to keep up deep insensibility during the whole time required for all ordinary surgical operations when morphia has been injected under the skin.

Of the other great risk of chloroform—paralysis of the heart—I have happily had no experience either before or since I adopted my present practice, and I am aware that this terrible accident sometimes occurs during the first few minutes of the inhalation of chloroform before anesthesia has been established. But the danger of this accident occurring during the stage of deep insensibility will, it stands to reason, be diminished in proportion to the smallness of the dose of the anesthetic required to cause and reproduce the anesthesia. The combination of the hypodermic use of morphia with the inhalation of chloroform would, I am confident, if universally practiced, by acting in this way, materially lessen this grave danger. One death from chloroform is said to occur in five thousand cases; so that the experience of any one practitioner is not sufficient to form an opinion of the value of any procedure calculated to avert its risks. But if I have eliminated, as I believe I have, from my practice one of the dangers of chloroform—paralysis of the function of respiration due to overdoses of the drug—it is reasonable to think that an expedient whose chief value lies in the smaller doses required to produce the desired effect will serve to diminish other risks arising from the same cause.

OPHTHALMIA NEONATORUM—PURULENT CONJUNCTIVITIS.

Dr. J. R. Wolfe, in a lecture on this subject (*Med. Times and Gaz.*, vol. ii., 1880, p. 259), says he has found that the larger number of the incurable blind owe their misfortune to the purulent ophthalmia of infancy. He urges upon practitioners the importance of abandoning the old routine treatment for this difficulty, and suggests the following measures. The diagnosis of the affection is as follows. On the third or fourth day after birth the baby's eyelashes are found stuck together with crusts forming at the borders, which are red. Next day the lids are more swollen, and the conjunctival sac filled with transparent, yellowish-colored serum and mucus.

Within a week all the symptoms become intensified and there is a copious discharge of pus, which runs over the cheeks. The eyelids are swollen so that they can only with difficulty be opened, and the cornea is found hidden and retracted in the purulent discharge. The cause of the trouble is that the child, in its passage from the uterus, has had its eyes inoculated with gonorrhœal or, possibly, leucorrhœal discharge from its mother's genital organs. The suppuration goes on in the eye until the reproduction of epithelium cannot keep pace any longer with the pus-formation; then the covering becomes imperfect; the conjunctiva and subconjunctival tissues are attacked at the limbus; ulceration or abscess of the cornea ensues, ending in perforation; the eyeball bursts; the lens is evacuated; and the ball shrinks. Should the eye escape disorganization in some of the milder attacks, opacity of the cornea is left behind causing strabismus, amblyopia, nystagmus, or opacity of the lens-capsule (capsular cataract).

If the old-fashioned, deleterious treatment is followed, which consists in dropping a solution of argenti nitrat. (gr. x ad ʒj) into the eye, the effect is either that the pus washes away the solution, rendering it innocuous (for it never touches the diseased surface), or it irritates the cornea, denuding it of its protective epithelium; the cornea ulcerates, or an abscess is formed, leading to the disorganization just referred to. Meanwhile, the eyelids swell so that the ball cannot be examined, and when the swelling goes down the eye is found to be gone.

Dr. Wolfe's procedure is as follows:

1. When seen in the first stage, before the purulent discharge has set in, the patient's head is placed on a towel and secured on the doctor's knees. The lids are then everted, singly or together, and, after cleaning them with dry lint, he touches the conjunctival surface with lint dipped in this solution:

℞ Boracis, gr. x;
Aq. rosæ, fʒj;
Aquæ ad fʒvj.—M.

One dessertspoonful in two ounces of warm water.

He then puts a few drops of the solution of atropin upon the conjunctival surface:

℞ Atropiæ sulph., gr. j;
Aquæ, fʒij;
Glycerinæ, fʒss.—M.

The application is repeated three times a day. The atropin has an antiphlogistic effect upon the inflamed surface, and also, by dilating the pupil, relieves the tension of the eyeball. Dr. Wolfe never uses cold applications, nor does he employ ointments to keep the lashes from sticking together; washing with warm water is better. Dry lint is then applied to the lids and secured by an immovable bandage. The case is watched carefully.

2. When the case is found to be unmistakably

one of purulent ophthalmia, the lids are everted one after another, dried as before; a few drops of the solution of atropin dropped in, the surfaces touched with a stick of argenti nit. two parts, potass. nit. one part, and a few more drops of atropin put upon the cauterized surface. When the conjunctival surface is bleeding (a favorable symptom), it is dried with lint and the cauterization repeated. The whole conjunctiva is touched, and also the *cul-de-sac*. He bathes it with lint and warm water, and covers the eyes with dry lint and a bandage. If one eye only is affected, the other is closed with court-plaster and covered with lint.

3. When called to see a case in the stage of advanced suppuration, say of three or four weeks' standing, the eyelids must be opened with great care, as the eyeball may be ruptured. If the cornea is found intact, the atropin and nitrate of silver pencil are to be used.

4. When an ulcer of the cornea or an abscess has already formed, it is the more urgent to use the nitrate as the only weapon to combat the disease. When the cornea is not actually ruptured, Dr. Wolfe generally manages to arrest the progress of the disease, and save it even if it is found in the process of softening or with an abscess. Such cases should be seen daily. In public hospitals or dispensaries Sundays must not be excepted, for one day's neglect may prove disastrous.

ALOES FOR PILES.

Dr. Fordyce Barker advocates the use of aloes in hemorrhoids. The following formula is proposed by him:

℞. Pulv. aloes. Soc.....
Saponis Castil.....aa ʒj
Ext. hyoscyami..... 3 ss
Pulv. ipecac.....grs. v.

M. ft. pil. No. xx. Sig.—One morning and evening.

When the patient is anæmic he adds to the above twenty grains of the sulphate of iron. A popular and very useful aperient in piles is a combination of equal parts of the bitartrate of potassium and sulphur, given in milk. Sulphur internally exercises a most soothing influence on the inflamed tumors more than can be fairly attributable to its aperient action.

In those who have, or are predisposed to have hemorrhoids, Dr. Barker recommends the following:

℞. Magnesiæ sulph.....
Magnesiæ carb.....
Potass. bitart.....
Sulphur. sublim.....aa ʒss

M. Sig.—From a teaspoonful to tablespoonful of the powder in a wine-glass of sugar and water before breakfast.

This powder produces a soft evacuation without pain, even when the tumors are inflamed.

TREATMENT OF HEMORRHOIDS.

I imagine it will be better for the class, before presenting the patients, to say a few words concerning the affections, that you may understand the nature of the cases.

As I have often remarked, it is a fact that very few general practitioners diagnose these affections correctly, for the simple reason that they fail to examine the patient. It is a frequent occurrence for the surgeon to find, upon the presentation of a patient to him suffering with internal hemorrhoids, that an ulcer or other trouble has been diagnosed by the physician. Many times a serious condition is supposed to exist, whereas upon an examination a simple affection, easily relieved, is found.

I have not talked to you at all upon the subject of piles, and I propose to do so this afternoon; and in order to make my remarks impressive I shall bring some cases before you; but before they arrive I wish to speak of the diagnosis, the prognosis, and the treatment of external hemorrhoids.

From time immemorial piles have been classified as external and internal, and while that is the true classification, you may have, of course, some internal piles that are partly external, and per contra, some external that are partly internal. But at the same time, when you come to make the distinction, all you have to do is to return the protruding part, and if it goes upon the sphincter you can safely say it is an internal pile. The difference, however, between the internal and external is very great; and yet you will meet with many cases of external piles that have been diagnosed as internal, and very often with cases in which no distinction has been made. It has simply been stated to the patient he has piles, leaving him to infer either internal or external: yet the treatment must be radically different.

Many causes are recognized as efficient in producing external hemorrhoids; thus, you may say that diarrhoea, constipation, dysentery, over-indulgence of the sexual appetite, too high living, sitting upon a cold seat, intemperence, may all cause this development.

External piles can be divided into two classes, and one division ought to be called simply "tabs of skin." The other is a little venous tumor. It is the bursting, likely of a small vessel, and the blood has run into the tissues and coagulated. Now, whether it be true that this coagulation is simply in the tissues or in the vein itself is a matter of little importance, because the treatment is the same in either case.

Having met with this order of piles in its simple, uninfamed condition, you would naturally suppose that they do not amount to much, and you will be led into the error of prescribing some simple application and sending the patient home. But if you see it when it is inflamed, and has grown to be as large as a walnut, likely (and everything coming in contact with it causing the patient pain), you will then see they can be a source of much annoyance;

and if you meet with them in this inflamed condition, the question at once arises, How are you going to treat them? Remember, I say in this *inflamed* condition; because you are not called upon to treat a simple little tab of skin; but it is when they became inflamed, and engorged, and angry looking. The only question then can be, Must you operate upon it when it is inflamed? Surgeons, of course, take the position, and very correctly so in the majority of cases, that no portion of the human economy ought to be cut or operated upon when inflamed. Is that true in reference to this affection? I think not; though, before you would resort to the operation you can make some application to it, if you prefer, to quiet the irritability, and the best thing you can do is to bathe them with cold water. You will find this, gentlemen, always one of the best applications, in these cases, to relieve the irritation. Suppose that is not sufficient, however, then what is the best application in addition to this? If you are consulted at your office, my advice to you is simply to apply belladonna and extract of opium, in equal parts, with the direction to the patient to apply it again the next day, after a thorough ablution in cold water. If they will follow these directions and repeat the same for two or three days, this inflammation will have disappeared from this external tab of skin.

Then you have relieved this suffering for the time being; but have you cured the pile? No. This tab of skin is there, or this venous tumor has just been reduced to the size it was before the inflammation.

Now what are you to do? Well, gentlemen, I am glad to say that the treatment of external hemorrhoids is very simple and very effectual. If it consists of a tab of skin, clip it off with a pair of curved scissors. You will find a great many patients who will object to the knife, but you can assure them there is no other hope for a cure.

After this operation all that is necessary is to apply some persulphate of iron; if there is much hemorrhage dress it with a T-bandage, and let your patient go home. The only question that could come up, then, would be, Should you allow them to take exercise? You will find they will go about their business as usual. If the hemorrhoid consists of a little coagulated blood tumor, then I think it is advisable to either cut off this, as you would a tab of skin, or, with a bistoury, cut into it and evacuate the blood. If this has existed for a long time, or if there are any flaps of skin that can fall into this cut, with a pair of scissors cut them off.

This constitutes the treatment, and the only sensible treatment, for external hemorrhoids.

CASE 1.—Now, I have told you that external hemorrhoids are liable to become inflamed. I will add, they are also liable to become ulcerated. You will find that as they exist they are liable to be rubbed by the clothing, or possibly there is a discharge from the bowel that, coming in contact with the tab of skin, will inflame it, and therefore

there is a considerable pain, not only in defecation, but also in walking or any other exercise.

This man says he had an attack of piles about ten years ago. Those were probably internal piles, which, ascending above the sphincter, never troubled him again, or one of these tabs of skin that has never since been inflamed. To-day he has them, not only inflamed, but ulcerated. When this inflammation has subsided they will be only about one-fifth their present size. Here at another point, is one of these tabs of skin uninflamed. If it should become so, it would be much larger than this which is now inflamed. Here bordering upon the perineum, is some superfluous skin that may become inflamed and give rise to the same amount of distress.

Now let us apply the treatment to this case. But first let me urge you never to be satisfied with the diagnosis of only one class of trouble, because if you do you may be guilty of operating upon external hemorrhoids when there exist at the same time internal. Besides, in a case like this you may have fissure, or a narrow fistula, or an ulceration, or a stricture of the rectum; therefore we will proceed, by the introduction of a finger, to determine if anything else exists, more than is apparent externally..... These are simply external hemorrhoids. We will apply the belladonna and opium here for a day or two, and then the only sensible thing remaining to be done is to operate, and that operation consists in cutting them all off, because if you leave any they may become inflamed and give us much trouble again.

Now, here is one that is ulcerated. If you rely upon local applications to cure this, it would require three or four weeks to accomplish that result, while if you operate upon it at once, you see the ulceration, being confined to the pile, is removed, and the man is relieved of his hemorrhoid and the ulceration both at the same time. It is remarkable how readily these wounds heal. If you apply the persulphate of iron and put on a T-bandage he will be well in three or four days, and will suffer no relapse. It is not necessary even to confine his bowels, as we do in most cases of operations upon hemorrhoids, by some form of opium. It will be sufficient for him simply to bathe the parts and keep them clean, and this, gentlemen, constitutes a radical cure for hemorrhoids of this character.

I would not have you waste your time with these patients, applying ointment for weeks, when you can do this operation at your office and send your patient home not only relieved but absolutely cured.—*Clinic of Dr. Matthews, Louisville, reported in Medical and Surgical Reporter, Philadelphia.*

OBSTETRICAL EXPERIENCES.

Dr. David M. Williams of Liverpool, in an abstract of 2,500 confinements "chiefly among the comfortable middle classes," states that he

considers the forceps a great boon, always to be used with comfort and safety, without injury to the mother, and in only one case did he find craniotomy necessary. For over twenty years he has introduced the forceps into the uterus, often saving the child by that means, when the os was very narrow, but dilatable. He had only employed chloroform in the first stage to overcome rigidity; in the second stage he often administered it till complete unconsciousness was produced, believing that the perinæum may thus be frequently saved from rupture, and accident which will sometimes occur after every precaution. He has cured a complete rent, involving the sphincter, without operation, by rest, local cleanliness, and the induction of temporary constipation by opium. He trusts in ergot especially as a preventative of flooding in cases where the pains are weak and the intervals long. He denies, on the evidence of distinguished travellers contrasted with the records of contemporary British practitioners, that puerperal mortality is the result of civilization. The truth is quite the other way, and by acting on increased knowledge, more lives will yet be saved.—*British Medical Journal.*

FUNGOID ORIGIN OF DIPHTHERIA.

Dr. Michael Taylor of Penrith, in recording an isolated outbreak of diphtheria, expresses his belief in the influence of dampness as an exciting cause, and in the connection with that disease of certain fungi associated with dampness. Three children, living in the same house and occupying the same bedroom, were all seized with diphtheria last August, in a district then free from any epidemic. The house was very healthy until the water-spouting of its roof got out of order. A great rainfall in July caused one wall of the bed-room to become saturated, through leakage of the spouting, the paper on the wall facing a passage, between the apartment and a second bed-room, became sodden and separated from the plaster, and small clusters of a toadstool (*Coprinus*) grew on the wall, as well as a fine thready bluish mould. The drainage of the house and its drinking-water supply were very good. Excepting near the damaged spouts, the house was dry; and it is remarkable that the three children slept several weeks in their warm cribs in the damp room, without suffering in any way, and it was not until the fungi appeared that they were attacked with true diphtheria. This is in accordance with Professor Laycock's theory, that diphtheria depends on *Oidium*, or potato-fungus, for although in Dr. Taylor's case another vegetation was in question, there is fair reason to believe that the sporules of many kinds of fungus may not merely irritate, but directly infect the mucous membrane of the throat.—*British Medical Journal.*

TREATMENT OF SPASMODIC ASTHMA.

By R. B. FAULKNER, M.D., Allegheny City, Pa.

On the first day of last April I was called to attend a lady, aged fifty years, whom I had attended at different times for over three years. On that day commenced the most violent attack of asthma she had ever had. Until the 10th day of May she had never left her room—scarcely ever the chair in which she sat. Breathing was difficult, without intermission. So much medicine had I given her that now I was beginning to fear the result in her case. Morphine quieted her, but as soon as I diminished its quantity the dyspnoea returned as bad as ever. At last her limbs became very much swollen; she became very weak, having had no appetite at all. I feared emphysema; I feared a termination of my case in dissolution. The lady had been a life-long sufferer from asthma; was a farmer's wife, but for over three years has been a resident of this city and a lady of leisure. As a last resort the idea arose in my mind, and I applied counter-irritation over the pneumogastric nerves from the upper part of the thyroid cartilage to near the upper borders of the clavicles, with tincture of iodine, even to blistering, when relief followed so rapidly and completely as to make me doubt that it was due to my application. In twenty-four hours the lady was greatly improved, and within forty eight hours from the time of painting her neck *her asthma had disappeared entirely*. I was not satisfied, but had determined to paint her again so soon as the asthma returned. It has not yet returned. After the paroxysm had terminated, she took iodide of potash for several weeks, and has been better than ever before in her life.

The next case is that of a gentleman, æt. 42 years, a farmer. He has had spasmodic asthma all his life. His mother had it through her lifetime. He had been having attacks, growing worse every night, for a long time. I at once applied *counter-irritation over the pneumogastric nerves* in the neck, and placed him on iodide of potash. The night of the day on which I painted him (August 12th) he slept. He said that "he never saw relief come so quick. That last night was the most pleasant night he ever had."

Case III.—Gentleman, æt. 32, afflicted with spasmodic asthma since he was two years old. Had been having attacks every night. I painted his neck with iodine, making a streak about half an inch in width, and ordered potash internally. I cured the paroxysms.

All I have observed and all I claim for this treatment is relief of the paroxysm; and, thus far in my experiment, of the first paroxysm in which it is applied, because the patients have had no more since I first applied it, but all continue better.

These are three cases, consecutive, and all made better. It is a very limited number, but recollect they are consecutive cases of pure spasmodic asthma which have occurred within five months in

my practice, and as I may receive no new cases for some time, I speak of them for what it may be worth.—*N. Y. Med. Record.*

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THE HAYVERN MURDER CASE.

One of the most important cases which has ever come before the Criminal Courts of this Province was tried in Montreal, before the Hon. Justices Monk and Cross, during the October term of the Court of Queen's Bench. It is the first time in Canada that the plea of insanity has been urged as a defence in a trial for murder. On account of its being regarded as a test-case, the Court allowed considerable latitude to both prosecution and defence, and gave the case a patient and careful hearing. The trial extended over four days, and ended in the prisoner being convicted of murder and sentenced to death, the plea of insanity not being sustained. As the case has excited a great deal of attention in Montreal, and has important medico-legal bearings, a brief resumé may be of interest to our readers.

The prisoner, Hugh Hayvern, is a stout, thick-set, muscular man, twenty-eight years of age, with black hair and whiskers, small deep-set restless eyes, and a sullen dogged look. Throughout the trial he seemed indifferent and unconcerned, chewing tobacco vigorously; nevertheless, he watched the proceedings closely, and occasionally darted quick, furtive glances at the jury. From the age of twelve he has been a drunkard, loafer and thief, a desperate character and a terror to the police. This is the twenty-fifth time he has appeared before the Courts since November, 1872.

At the time of Salter's murder the prisoner was serving out a five years' sentence at the St. Vincent de Paul Penitentiary for highway robbery. Twenty months had already elapsed, during which period he was quiet and orderly, though at times inclined to be moody and taciturn. The prisoner being a cleaner, and the deceased a lamplighter, their duties occasionally brought them together. Latterly some bad feeling seems to have existed between them. The St. Vincent de Paul convicts dread being transferred to the Kingston Penitentiary; Hayvern suspected Salter of trying to secure his removal thither. Salter still further enraged Hayvern by calling him some insulting names. Smarting under these injuries, real or imaginary, Hayvern secretly and deliberately prepared his revenge.

An old file, ground down and sharpened to a fine point, was fixed in a rough wooden handle. On the 29th of June, armed with this weapon, Hayvern obtained permission, on the plea of illness, to dine upstairs in the hospital. Instead of eating his dinner, he paced up and down the ward, and out upon the landing, as if waiting for some one. When his fellow-convicts had finished their dinner below, they filed upstairs, past the hospital door, on their way to chapel. When Salter appeared, Hayvern rapidly crossed the passage, threw his left arm around Salter's neck, and with the dagger in his right hand stabbed him to the heart. As Salter staggered back, mortally wounded, the prisoner said, "you will not call me a —— again." For a moment he stood motionless, then turned and walked downstairs to his cell. Several of the guards tried to stop him and secure the dagger, but without success. In the cell he seemed to be excited, and stubbornly refused to surrender his weapon to the warden and deputy warden. He voluntarily told the warden that he had stabbed Salter with a knife, and that he had "*done for Salter.*" When asked for the knife he brandished it in a threatening manner, and declared that they would never get it away from him unless they fired on him with their revolvers. Meanwhile Salter had died. When the prisoner heard the news he tried to cut his throat. The attempt at suicide was not serious; for, although he had every opportunity to effect his purpose, he inflicted only a slight, superficial scratch. The Reverend Father Knox then tried to obtain the knife. His first attempt was unsuccessful; but, returning shortly after, arrayed in priestly vestments, he succeeded, upon promising

to administer to the prisoner the rights of the church. Being given the choice of his cell or the sacristy, Hayvern chose the latter, quietly went with the priest thither, made confession, and received the Sacrament of Penance. During the afternoon he told one of the guards that he had stabbed Salter, because Salter wanted to send him to Kingston and for several other reasons besides.

In defence, the Counsel for the prisoner urged the plea of insanity, affirming *imbecility* and *epileptic mania*.

In support of this plea the mother and uncle of the prisoner testified that he was subject to "*fits*" when about seven years of age. These fits were characterized by convulsive movements and frothing at the mouth: they came on about twice a week and extended over the period of a year. Medical aid was never deemed necessary. Ever after he seemed childish or simple. He was sent to school, but either would not or could not learn; his teachers sent him away because they could make nothing out of him. He can read and write. When about twelve years of age he began to drink; since then he has rarely been sober, except while in gaol. When under the influence of liquor, he was very violent and abusive, requiring constant and careful watching. Young children were then his associates. He could never be induced to work for his living.

Several of his fellow-convicts testified that in the Penitentiary he was sullen, morose, and solitary; he talked and acted strangely, and seemed bent on committing suicide. He asked one for poison, another for a knife: he requested one to knock his brains out with a club, another to stab him, while he dared a third to go down to the cellar with him and drink poison. Although thus importuned, none of these convicts thought it necessary to report his sayings or doings to the Penitentiary authorities.

Mr. Payette of the Montreal Gaol was called to prove that the prisoner fell some twenty-five feet while trying to escape by the gaol-roof, the night before he was transferred to the Penitentiary. The attempt was clever and daring, and would have been successful had it not been for the breaking of the rope.

The Reverend Father Knox testified strongly in favor of insanity, basing his opinion largely upon Hayvern's conduct in his cell, and laying most stress upon his restless movements, heavy

dogged expression, and disjointed incoherent mutterings. The words "*Kingston*" and "*quiet*" were repeated several times. Prisoner said he would never go to Kingston Penitentiary. Father Knox believed that prisoner was a madman, and irresponsible for his acts, and at that time had not common-sense enough to save his soul. Notwithstanding this strong and sweeping opinion, the reverend gentleman found it somewhat difficult on cross-examination to explain why he had administered the Sacrament of Penance to such an utter lunatic.

Dr. Henry Howard, Government visiting physician to the Longue Pointe Asylum, was the chief Medical witness for the defence. He visited the prisoner on the 26th and 31st of August, remaining about an hour with him on each occasion. As the result of his examination, he gave it as his opinion that *the prisoner is an imbecile of a low order, and an epileptic maniac*, and that, *on the 29th of June, he was irresponsible for his acts, although quite able to distinguish between right and wrong*. Dr. Howard recognized in the prisoner two distinct conditions, viz., *imbecility* and *epileptic mania*. He was of opinion that the murder was caused by an attack of *petit mal*, that Hayvern was perfectly unconscious of what he did, and was therefore irresponsible for his act. Towards the close of the trial, however, Dr. Howard was recalled by Judge Monk, and stated to the Court that, on the 29th of June, the prisoner was able to distinguish between right and wrong, but was laboring under an *uncontrollable impulse*. Dr. Howard based his conclusions upon: (1) an examination of the facts elicited at the Coroner's Inquest, (2) a short conversation with the prisoner, (3) a physical examination of the prisoner. The following points were noted and emphasised:—great pallor of surface, profuse perspiration, low temperature, rapid visible pulse, rapid respiration, abdominal aneurism, sluggish pupil, and diminished cutaneous sensibility. The æsthesiometer and electro-magnetic battery were employed to determine this last-mentioned condition. He laid great stress upon the value of the thermometer, æsthesiometer and especially the electro-magnetic battery in the diagnosis of insanity.

On cross-examination, Dr. Howard affirmed his ability to diagnose imbecility by inspection. He denied the existence of monomania or partial insanity, and claimed that if a man is really insane upon any one point he must be insane upon all,

his mind must be a total wreck. He denied the possibility of *insanity* and *responsibility* co-existing; he maintained that, although there are different degrees of insanity, it is impossible to conceive of an insane man being either *morally* or *legally* responsible for his acts. He admitted the difficulty, or impossibility, of diagnosing marked eccentricity from mild insanity, and asserted that insanity is far more widespread than is usually supposed; nevertheless, he held that even *mild insanity* is incompatible with legal *responsibility*. He claimed that an *irresistible impulse* might impel a man to commit a crime, and when it did so the criminal could not be held responsible. In order to test his views upon *irresistible impulse*, the following question was propounded to him by the Crown Prosecutor: could a man, prompted by revenge or hatred, premeditate a deed of violence, prepare and conceal a weapon, lie in wait for his victim, and perpetrate a murder—and could he, although at the time able to distinguish between right and wrong, be held irresponsible for his crime on the ground of an *irresistible impulse*? Dr. Howard asserted that *irresistible impulse* in such a case was quite possible, and would confer irresponsibility.

When asked what led him to infer that the crime had been committed under the influence of epileptic mania, he said that Hayvern's standing still for a few moments after stabbing Salter proved that he was having then an attack of *petit mal*.

Dr. Angus McDonald briefly corroborated Dr. Howard's views as to the prisoner's insanity and irresponsibility.

In rebuttal of the plea of insanity, the Crown Prosecutor examined the physician, wardens, steward, and other officials of the Penitentiary as to the prisoner's conduct and health during the twenty months he had been under their charge previous to the murder. Their unanimous testimony was that he had always been quiet and orderly, though inclined to be moody and despondent; he had frequently been ailing, but his symptoms were either dyspeptic or else referable to his aneurism. None of them had ever seen or heard anything to arouse suspicion of either epilepsy or insanity. Sleeplessness was never noticed until after the murder.

The officials of the Montreal Gaol testified to the absence of epileptic symptoms while he was under their charge. They had not remarked anything like imbecility in either speech or actions.

He was neither better nor worse than the average class of criminals that pass through their hands.

Dr. Robillard, Government Inspector of Insanity in prisons, testified that he visited and examined Hayvern in the Montreal Gaol on the 17th, 19th, 20th, 21st, 22nd, 23rd of September. He found the pulse and respiration somewhat rapid at first; but before his visit was concluded they became quiet and natural. The temperature was taken at each visit, and was always normal. The prisoner would answer questions freely and rationally enough upon any subject except the murder; but no artifice could ever induce him to admit that he knew or remembered anything about that. Dr. Robillard never saw any signs or proofs of epilepsy, and did not consider him to be an epileptic. He recognized in the prisoner not *imbecility*, but great *moral degradation*, the natural result of a career of dissipation and crime. He believed that the prisoner was perfectly conscious of what he was doing when he stabbed Salter, and was quite capable on that occasion of distinguishing between right and wrong.

Several police constables were called to prove that the prisoner was a very hard case, and associated with a desperate gang of roughs and loafers, all about his own age. Their evidence conflicted with that of the mother and uncle, who made out that prisoner was foolish and simple, and associated only with little children.

The Crown retained the services of three medical experts: Dr. Vallée of the Beauport Asylum, Professor of Medical Jurisprudence in Laval University, Quebec, and Drs. Gardner and Cameron Professors of Medical Jurisprudence in McGill and Bishop's Colleges, Montreal. These gentlemen had not been called upon to examine the prisoner previous to the trial, and consequently were not witnesses of fact.

Assuming all the evidence that had been adduced in the case to be true, they were asked to give an opinion upon the following points:

(1) From the evidence adduced does it appear that Hayvern is an *imbecile*?

(2) Is he an *epileptic maniac*?

(3) Does it appear from evidence that on the 29th of June the murder was the result of an *irresistible impulse* on the part of the prisoner?

(4) On the 29th of June was the prisoner capable of distinguishing between right and wrong?

(5) Throughout the trial has sufficient evidence

been brought forward to prove the prisoner's *insanity and irresponsibility*?

In reply to these queries the three Medical experts testified that, in their opinion, sufficient evidence had not been adduced to prove that the prisoner was either an imbecile or an epileptic maniac, or that the murder was the result of an irresistible impulse; they believed that at the time of the murder he was quite capable of distinguishing between right and wrong: they furthermore did not consider that the evidence was sufficient to prove the prisoner's insanity or irresponsibility.

They were examined somewhat in detail as to the value of the various diagnostic signs emphasised by Dr. Howard, and pointed out the fallacies that might arise in basing a diagnosis of insanity upon the results of an ordinary physical examination. Low temperature, rapid pulse and respiration, sluggish pupil, sleeplessness, and impaired cutaneous sensibility were shewn to be common symptoms in many other forms of disease, and could not be considered of themselves diagnostic of insanity.

After lengthy addresses by the Counsel for the defence and the Crown Prosecutors, His Honor, Mr. Justice Monk delivered his charge to the jury. He said that it had been proved beyond doubt that there was premeditation and malice aforethought. "Hayvern prepared his knife, waited for his victim, and executed his crime most effectually. The deed was one of the most skilfully performed tragedies on record. But there is another point, and that is the plea of insanity. His convulsions in childhood were not proved to have been epileptic. It is admitted by all the medical witnesses that he knew right from wrong. But he is said to have been the subject of an *uncontrollable impulse*. It is the first time the prisoner is known to have had an uncontrollable impulse. It is strange that in the whole period of his criminal life he should have chosen, for such an impulse, the moment when he was in the possession of a deadly weapon, and had premeditated the assassination of the man whose murder he actually accomplished."

His Honor was of opinion that the prisoner at the bar was guilty of the murder of Salter; he had no faith at all in the plea of uncontrollable impulse which had never been admitted in Canada, and only in special cases in England.

His Honor considered Dr. Howard, although undoubtedly a man of large experience, to be

"a scientific enthusiast whose mind on this subject is made up of many theories; and the jury must decide whether these are corroborated by facts."

His Honor then very clearly and concisely laid down the law in such cases. He said that, with respect to the fact of the murder, the clearest proof must be submitted to the Court; if any doubt existed the prisoner must get the benefit of it. The law of England presumes a man to be innocent until he has been proved guilty. But when once the fact of murder has been proved or admitted, and the plea of insanity set up in defence, the presumption is against the prisoner. The law holds a man to be sane and responsible until he has been proved to be insane and irresponsible. The burden of proof, therefore, in such a plea lies with the defence. Vague theories or suppositions will not satisfy the law; clear and conclusive proofs of insanity and irresponsibility are absolutely necessary. In such cases the question to be decided is, whether or not the prisoner committed the deed with *intention, will and malice*; in other words, Was it his act? Could he help it? Did he know it was wrong?

After a deliberation of twenty-five minutes the jury brought in their verdict, "guilty of murder," and the unfortunate man was sentenced to be hanged on the 9th of December.

COLLEGE OF PHYSICIANS AND SURGEONS, P.Q.

The semi-annual meeting of the College of Physicians and Surgeons of the Province of Quebec was held on the 28th Sept. at Laval University, Quebec. The following Governors were present:—Dr. R. P. Howard, President, the Honble Dr. Theodore Robitaille, Drs. J. J. Ross, Drs. Laoueur, Come Rinfret, Gervais, Perrault, Belleau, Rottot, F. W. Campbell, Austin, Kennedy, Lafontaine, Bonin, Marmette, Lemieux, Hingston, Ingras, Worthington, Craik, Marsden, Laberge, Gibson, R. F. Rinfret, Rodgers, Sewell, Parke, Machapelle, Rousseau, De St. George.

Immediately after reading the minutes of the last meeting, His Honor Dr. Theodore Robitaille, the Lieutenant Governor, moved, seconded by Dr. Marsden, and it was resolved unanimously:—

That this Board has learned with deep regret of the death of Dr. F. A. H. LaRue, Professor of the Medical Faculty of Laval University, a gentleman distinguished alike for his medical and

scientific attainments, and whose reputation extended not only throughout the entire Dominion but to the neighboring Republic. This College, of which he was so long a member, desires to extend to his family and relatives their sincere sympathy in their bereavement.

On making the motion, His Honor paid a well-merited tribute to the memory of the deceased's, and was followed by Doctors Marsden, Hingston and Howard.

The following Graduates obtained the license of the College, on presentation of their respective diplomas:—*Laval University* (Quebec)—L. G. Phileas DeBlois, M.D., St. Henri de Lauzon; Aimé Trudel, M.D., Three Rivers; Ls. Alex. Chaussegros De Lery, M.L., St. François, Beauce; Napoléon Mercier, M.L., St. Jean Chrysostome; Chs. Noel Barry, M.D., St. Anne de la Perade; Pierre Alex. Gauvreau, M.L., Rimouski. *Laval University* (Montreal)—Jos. Ed. Lemaitre, M.D., Pierreville; Gustave Demers, M.D., Montreal. *Victoria University*—A. Gibeault, M.D., C.M., St. Jacques l'Achigan; Gilbert Huot, M.D., C.M. *McGill University*—Wm. L. Gray, M.D., C.M., Geo. T. Ross, M.D., C.M. *Bishop's College*—Frank M. R. Spendlove, C.M., M.D., Robert H. Wilson, C.M., M.D.

Mr. T. J. Symington, graduate of Queen's College, Kingston, Ontario, obtained the license after passing a successful examination.

The Committee appointed at the last meeting of the Board to consider whether it was in accordance with the Medical Act and the By-Laws of the College to permit a student to take his fourth year of study with a medical man, *after* having passed all his examinations, reported against it. The Committee was unanimously of the opinion that the year of study with a practitioner must be taken by the student the second or third year. The report was adopted by the Board without a dissenting voice, and the Secretary was instructed to notify the various Model Schools.

The Treasurer presented an *interim* report, which showed the finances of the College were in a healthy condition, after which the Board adjourned.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

The annual meeting of this Society was held in their elegant rooms on the 14th October. The attendance was large, and the Treasurer's report

showed a handsome balance. The following officers for the ensuing year were elected :

President.—Dr. George Ross.

1st Vice-President.—Dr. Richard A. Kennedy.

2nd Vice-President.—Dr. Thomas A. Rodgers.

Treasurer.—Dr. W. A. Molson.

Secretary.—Dr. O. C. Edwards.

Council.—Dr. Francis W. Campbell, Dr. Rod-dick, Dr. Osler.

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PIGEONS AS MESSENGERS FOR PHYSI- CIANS.

A late number of the *New York Times* says that:—

“A physician of Erie, Pennsylvania, is training homing pigeons for use in his practice. Some of his young birds put upon the road to make records for distance have made very good time, viz., 50 miles in 90 minutes, 66 miles in 82 minutes. Homing pigeons are largely used by country physicians both here and abroad. One doctor in Hamilton County, N. Y., uses them constantly in his practice, extending almost over two townships, and considered them an almost invaluable aid. After visiting a patient he sends the necessary prescription to his dispensary by a pigeon; also any other advice or instruction the case or situation may de-

mand. He frequently also leaves pigeons at places from which he wishes reports of progress to be dispatched at specified times or at certain crises. He says he is enabled to attend to a third more business at least through the time saved to him through the use of pigeons. In critical cases he is able to keep posted by hourly bulletins from the bedside between daylight and nightfall, and he can recall case after case where lives have been saved which must have been lost if he had been obliged to depend upon ordinary means of conveying information.

PERSONAL.

Dr. Bibaud, Professor of Anatomy in Victoria College, had an attack of paralysis from which he died on the 18th October.

Dr. H. Larue, Professor in Laval Faculty of Medicine, died at Quebec on the 26th of September. He was an able and accomplished physician.

Dr. George W. Nelson (C.M., M.D., Bishop's College, 1879) has, owing to ill health, been obliged to relinquish practice at Marbleton. He shortly leaves for California, where he intends to settle.

Dr. Robert H. Wilson (C.M., M.D., Bishop's College, 1881) succeeds to Dr. Nelson's practice at Marbleton.

Dr. F. M. R. Spendlove (C.M., M.D., Bishop's College, 1881) has commenced practice at Beebe Plain, Que.

Dr. Mills (M.D., McGill College, 1880) has commenced practice in Montreal. He has been appointed assistant to Dr. Osler, professor of physiology in McGill College.

REVIEWS.

Anatomical Studies upon Brains of Criminals.

A contribution to Anthropology, Medicine, Jurisprudence and Psychology. By MORIZ BENEDIKT, Professor at Vienna. Translated from the German by E. P. Fowler, M.D. New York: Wm. Wood & Co., 1881.

The author starts with the proposition of Erasistratus that man thinks, feels, desires, and acts according to the anatomical construction and physiological development of his brain. If the cerebral constitution be normal, the individual is presumably sane and moral; if abnormal, he may be insane or criminal. The author affirms that the majority of condemned criminals present one of

the following psychological characteristics, either (1) inability to refrain from a repetition of crime, although conscious of the superior power of the law; or (2), a lack of the sentiment of wrong, although they have a clear perception of it. He endeavors to prove that the brains of criminals are not only individually defective in gyrus development, but present marked deviations from the normal brain-types of their respective races. He holds that crime differs from monomania in being the result of faulty psychical organization as a unit, the particular form of expression being determined by social circumstances. *Crime* is therefore a *psychological* act of the criminal; and if crime is to be successfully repressed or prevented, those who make and administer the laws must patiently and carefully study the psychological constitution and peculiarities of the criminal.

If Professor Benedikt's views are in the main correct, then the present system of penal legislation is radically wrong. Effects only are being created, while causes are ignored. The law is a failure; the spread of crime is not prevented; the criminal is not reformed, but in many cases is still further degraded and brutalized by punishment, and unfitted ever again to take his place in society as a useful and law-abiding citizen.

Professor Benedikt bases his conclusions upon the study of the brains of twenty-two criminals who had been convicted of theft, highway robbery, counterfeiting and murder. The observations have been carefully made, and although insufficient to justify the sweeping conclusions of the author, are valuable as a guide and stimulus to future investigation.

The translation has been well done; the print is clear and distinct, but the woodcuts which replace the photographs of the original work are somewhat blurred and rough. As a whole the work possesses considerable merit.

The Prescriber's Memoranda. New York: Wm. Wood & Co., 1881. Montreal: J. M. O'Loughlin.

To the busy general practitioner, this handy little vest pocket manual will prove invaluable. It has been brought well up to date; the prescriptions have been judiciously selected from the leading European and American writers, and on the whole fairly represent the most modern treatment of the commonest forms of disease. Besides prescriptions, it contains many useful formulæ of hos-

pital mixtures solutions and pills, and practical hints as to the general management of disease. For facility of reference, the sections are arranged alphabetically. To the country practitioner especially, we heartily recommend this little work.

The Popular Science Monthly. D. Appleton & Co., October, 1881.

The October number of this deservedly popular monthly contains much valuable matter. Particularly interesting to the medical reader, is the thoughtful and eloquent address of Sir James Paget on "The Cultivation of Medical Science," at the opening of the recent International Medical Congress. The address of the Vice-President, Professor Huxley, on "The Connection of the Biological Sciences with Medicine," is a masterly plea for improved biological training in our Medical Schools.

In marked contrast to these Scientific and scholarly productions is the somewhat flippant and sensational article of Dr. Felix Oswald on "Remedial Education." Dr. Oswald professes a thorough disbelief in the efficacy of drugs, and maintains that dieting and out-door exercise suffice to cure all forms of disease except scabies and venereal troubles. He considerably admits that antidotes and anodynes are useful, but he thinks that in time even they will be replaced by *mechanical* measures. He rides his hygienic hobby so far as to predict that, with the few exceptions mentioned, before the middle of the twentieth century, the internal use of drugs will be discarded by all intelligent physicians. Dr. Oswald's articles are pungent and vivacious, and in many respects interesting and instructive; but his conclusions are too sweeping and dogmatical, and had better be taken *cum grano*. Writers of Dr. Oswald's stamp mistake a general spirit of scepticism for scientific acumen; believing in nothing themselves, they do much to retard the advance of true science, by falsely pandering to the sceptical and infidel spirit of the age.

Lindsay & Blakiston's Visiting List for 1882.
Philadelphia: LINDSAY & BLAKISTON.

We have received a copy of this list, the first published on this continent. It maintains its position as the best Visiting List published. At least, we think so, and we have used it for many years. We strongly recommend it to our readers.

The Wilderness Cure. By MARC COOK. Wm. Wood & Co., New York; John W. O'Loughlin, Montreal.

To the invalid, debilitated in body and threatened with consumption, whose only chance is in a change of climate, this little volume will be found of peculiar interest. Its author was through ill health obliged to try the recuperative power of the Adirondack region, and from his experience enters into those minor details of camp life with all its drawbacks and requisites which are essential to the comfort of the invalid, but which cannot usually be obtained in books. Included in the work is an interesting paper by Dr. Loomis of New York on the St. Regis Country in the Adirondack region. The concluding chapter gives full details of cost and necessities required. The story is well told, and as it concerns a country which can be reached in a few hours should be read not only by invalids, but also by the physician who contemplates sending his patient away for a change of climate.

PRELIMINARY EXAMINATION.

The Preliminary Examination of the College of Physicians and Surgeons, P.Q., took place in Quebec on the 22nd of September. The following gentlemen were admitted:

William McClure, John J. R. Church, Henri Dazé, J. Daniel Casse, Joseph Piedalue, Louis F. Lepage, Norbert G. Chabot, Auguste Gagné, Alfred Laurendeau, Alfred Morin, Jos. A. Deschampsbeault, F. X. Tremblay, Lucien Beaudoin, Hormidas Brodeur, Oscar Clouthier, Philippe Grandpré, Siméon Grondin, Joseph Houle, Joseph Jetté, Louis Noel, Hector Palardy, J. Celebert Poissant, Alphonse Thibault, Arcadus Toupin.

We understand that several additional suits have been taken by the College of Physicians and Surgeons of the Province of Quebec, through their prosecuting officer, Mr. Lamirande, against irregular practitioners. In our last we mentioned that judgment had been obtained by the College against one Dragon. We since learn that this man did large and extensive practice in the Eastern part of this country where he has resided for the past fifteen or sixteen years. On judgment being obtained against him before the papers

could be served, he escaped to the United States and his family have since followed.

The College of Physicians and Surgeons of the Province of Quebec has obtained a conviction this month against a Madam Emelie Bonin, of St. Benoit, for practising illegally as a midwife. She confessed judgment and paid the fine.

THE TREATMENT OF GONORRHOEA.

Mr. W. Watson Cheyne, assistant-surgeon to King's College Hospital (*British Medical Journal*, July 24, 1880), has carried out a series of experiments in the treatment of gonorrhœa which are worthy of being extensively known. It has been demonstrated by Neisser that organisms are present in great abundance in gonorrhœal pus, and Mr. Cheyne has verified the observations by inoculating cucumber infusions with some of the discharge. Acting upon the known effects of certain antiseptic materials, he decided to adopt iodoform and oil of eucalyptus. In order to bring them into certain contact with the suppurating surface, he had bougies made of these materials and cacao butter. The formula is—5 grains of iodoform, 10 minims of oil of eucalyptus, and 85 grains of cacao butter. This bougie is introduced into the urethra, and a strap and pad over and around the orifice retains the bougie there until it is dissolved. After this, an injection of boracic lotion (saturated aqueous solution of boracic acid) or an emulsion of eucalyptus oil (one ounce of eucalyptus oil, one ounce of gum acacia, water to forty or twenty ounces), to be used for two or three days. At the end of that time injections of sulphate of zinc, two grains to the ounce, may be begun. For a day or two the purulent discharge continues, but afterwards it steadily diminishes in amount, becoming in four or five days mucous, and ceasing altogether in a week or ten days.

THERAPEUTIC VALUE OF TARTAR EMETIC.

Dr. A. B. Arnold, of Baltimore thinks this remedy has fallen into undeserved neglect. In inflammatory croup it is capable, if early used, of keeping it in the catarrhal stage, and preventing its passage into the membranous form. He gives in these cases one-twelfth of a grain every hour to a child. In one case, aged six years, he gave one-fourth of a grain every hour, with excellent results.

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RETIRING ADDRESS DELIVERED AT THE MEETING OF THE MEDICO- CHIRURGICAL SOCIETY OF MONTREAL.

BY

The President, WM. H. HINGSTON, M.D., L.R.C.S.E.,
Professor of Clinical Surgery, Victoria Medical
Faculty, Montreal, October 14th, 1881.

The Constitution and custom of this Society make it incumbent on the retiring President to take a retrospective glance at the work done by its members during the year. The clause in the Constitution which imposes this condition was written at a time when papers were less numerous and less varied in their scope than at present, and when the meetings of the Society were less frequent.

There are, moreover, features of interest now, which are to a great extent novel, yet, withal, so varied that it would be impossible to detail without confusing them and destroying their distinctness. For the work of the Society is not now limited to reading and discussing papers. Questions of

general medical interest—of medical politics—now and then come before it. Cases met with in practice are related; have their features discussed, and their difficulties sometimes perhaps increased, sometimes solved; and, with an occasional exception, pathological specimens are placed before us at every meeting, evidencing, at the same time, the most varied alteration in structure which morbid conditions create, or by which they are created, and the unwearying industry with which those departures from the norm are made obvious to our senses. In this special work I must record my own and the Society's indebtedness to our gifted friend, Dr. Osler.

During the past year the following papers among others were read before the Society:

Sub-diaphragmatic Abscess, by Dr. Gardner.

Case of Obstruction of Bowels, recovery after 67 days, by Dr. Edwards.

Remarks on Club Foot, by Dr. Roddick.

Vaccination in Skin Diseases, by Dr. Bessey.

Dilatation of Stomach, by Dr. A. L. Smith.

Delayed Resolution in Pneumonia, Dr. Osler.

Chronic Cystitis, treated by rapid dilatation of Urethra, by Dr. Gardner.

Puerperal Rheumatism, by Dr. Molson.

Varicose Veins antiseptically excised, by Dr. Roddick.

Evolution of Man with Haeckel's Views, by Dr. H. Howard.

Concussion of Spinal Cord, by Dr. Ross.

Case of Railway Accident, by Dr. Roddick.

Empyema, by Dr. Burland.

Stricture of Male Urethra, by Dr. Hingston.

Bigelow's Operation for Lithotrity, by Dr. Roddick.

Cases of Amenorrhœa, by Dr. Baynes.

Placenta Prævia, by Dr. Loverin.

Treatment of Dropsy by Nitro-glycerine, by Dr. Cameron.

A Peculiar Case of Paralysis, by Dr. Gurd.

Chorea, by Dr. Molson.

Empyema, with special treatment, by Dr. Phelps, Chateaugay, N.Y.

Disease of Cerebellum with Ferrier's views, by Dr. Wilkins.

Perityphlitis, by Dr. Armstrong.

Naso-pharyngeal Polypus, by Dr. Fenwick.

Report of International Medical Congress, by Drs. Howard and Osler.

Rupture of Ovarian Tumor, with recovery, by Dr. McConnell.

With other papers, making 31 in all, many of them possessing claims to excellence, while the comments on some gave evidence of extensive reading and intimate knowledge of the subjects discussed. The practical work of the Society did not stop here. Pathological demonstrations were given at every meeting, and over 50 specimens were presented. Patients suffering from peculiar morbid conditions were exhibited and results of treatment shown, by various members. Cases occurring in practice were related at each meeting, giving occasion to valuable observations.*

Apart from these, attention has been given to questions relating to public health, and to the well-being of the profession. Matters pertaining to medical ethics have received consideration and perhaps solution; and action has been taken to guard the interests of the profession before our Provincial Legislature.

But apart from, and beyond all these, work of a useful character has been silently done by this society, and perhaps without its knowledge: I

*The portion of the address in which the papers are enumerated, with details of the work performed, has been curtailed, having been already published in the reports of the meetings of the Society.

allude to the advantage it affords of meeting together at stated times; asking counsel of each other; sweetening the acerbities and rubbing off the asperities and angularities of each other. In these respects the Society has done good in being the cause of an opportunity to act kindly and charitably the one towards the other.

Almost the last mentioned amongst the papers read were those by Drs. R. P. Howard and Osler on their recent visit to Europe to attend the Medical Congress held in London in the early part of August. It is fortunate for the Society that these two gentlemen were its representatives, and representatives also for this Province. One of these gentlemen (the latter) has his name amongst the list of contributors to the work of the Congress.

I shall avail myself of the occasion, gentlemen, to say a few words on matters of general medical interest, if not connected with, at least suggested by, that Congress.

It was a gathering greater in importance, if not in numbers, than has probably ever yet taken place. It requires no small effort, no ordinary adjunct to a mere massing together, to draw out from the seclusion of their laboratories or from the theatre of their triumphs so many men of character and name, whose appearance—whether from Germany, or France, or elsewhere—was the immediate signal for an appreciative reception. Nothing could have more clearly manifested the catholic and liberal nature of science when men from various climes, and whose vehicles of thought were as varied as the regions which their "sun's bright circle warms," met together not to advance, perhaps, but to extend and to diffuse the results of their labors, and that we may have a few hypotheses less, to have a clearer and more comprehensive knowledge of those laws of nature and of their disturbance so far as they relate to the health and physical well-being of the human family. Some idea of the extent of the work accomplished may be gathered from the circumstance that upwards of three thousand persons assisted at the Congress. It was divided into fifteen sections and numerous subsections; the eye, ear, throat, skin, brain, receiving each their separate consideration; and even the teeth, and the diseases of children having their separate sections; that about submitted papers, some of which were more or less discussed; that the number of contributors was upwards of.

The subdivision into so many sections and subsections,—a greater number than at any former Con-

gress,—shows unmistakably the ever-increasing tendency to drift off into smaller and smaller channels of medical thought and research. In the infancy of medicine ailments of all parts of the body were attempted to be brought within the scope and intellectual view of the professor or practiser of the healing art; and in Great Britain, until some years ago, the duties of even physician and surgeon were commonly united in the same person. But when they became separate, the physician alone took the title of doctor; while the latter declined any other appellation than that of Mr. In this country, notwithstanding the attempt in some places at division and separation, the generic is common to all. And so pleased are some by slight gratifications, and the title of doctor so relished, that it, with the uberous M.D. are found, the former heading the more formal documents; the latter constantly met with at the foot of letters, private and friendly notes, legal documents, notes of hand, and perhaps, for aught I know, clothed with the appellation of honor and dignity making love to Nedar's daughter Helena: and if Demetrius why not John Smith, M.D.?

But this distinctive appellation—this sign of difference, if not always of eminence or even of dignity, will not long be equal to the purpose for which it was created. If English surgeons denied themselves, or were denied, the distinguishing mark of their calling, thinking it belonged more by right to the *medicine doctor*, why should it be appropriated by scientists deeply learned, forsooth, in the knowledge of a bicuspid? How will it be with him who deals but with the, let us say, the epiglottis, the epidermis, or the epididymis? Were it as it might be, and as it should be, the *educated* man possessed of a sufficient stock of general information, following the bent and inclination of his mind into some channel, however shallow, however narrow, however intricate; tracing it step by step to a higher and a higher elevation till it seemed to resolve itself into the mist which was its source, we could only approve and admire. But it would appear as if every portage or resting place in every current that could afford a foothold was seized upon as vantage ground where gain and profit could be best secured. And like another Miltonic character:

As in a cloudy chair ascending rides Audacious.

For, as Sir James Paget well observes, "the fault of specialism was not in narrowness but in the

shallowness and the belief in self-sufficiency with which it was apt to be associated."

It is greatly to be deplored that the *materia medica*, that commissariat of the physician, was not so organized and complete as to permit a special applicability to a special organ, or to a special part of an organ, without passing through the general system, every part of which had already been parcelled out and ceded to others—and it might be in legal phraseology added, "with the limits of which he was content, having seen and viewed the same." But when it is borne in mind that no one part can be reached without traversing another, and to the specialist perhaps a foreign and an unknown part, the difficulties in the way of the specialist are greatly increased. Holman the great endeavored to take a short cut to one of the organs, and with his pad to disperse and dissipate the "blood, choler, phlegm and melancholy" that hovered round the liver. But he forgot the muscles which belonged to one; and the ribs which had been ceded to a second; and the skin and its contained nerves and blood-vessels which belonged to many a dozen more. But the rape was made nevertheless, and with pecuniary advantage. A Scotch judge many years ago, it is related, had before him a malefactor who had stabbed a soldier. The judge, brimful of goodness, could find an excuse for what to us would appear the chief act in the drama, the stabbing of the *person* of the soldier; not so, however, with our Dogberry, who was prepared to receive excuses for that, to him, the minor offence, the mere stabbing of the person; but what he could not, and would not, admit excuse for, was the culprit's having propelled the "lethal weapon through the belt which the soldier wore which was His Majesty's." It must not be supposed that in my divergence I am convergent towards specialists (if I may be permitted for the nonce to coin a word), who, whether from choice or from aptitude, choose to confine themselves within one of the more limited divisions of medical science, while having a *fair general* knowledge of what is collateral and interdependent. Indeed it must be evident to us all that a division of labor has become necessary; and that it is impossible for one engaged in the general work of his profession to materially advance any section of it. But methinks the interests of the public generally would be better served by the intelligent general practitioner, who had familiarized himself with the general working of the economy, than by the specialists who

ever find in the case before them indication of disturbance of the organ which owns him master. And yet the necessity for the synthetical and constitutional treatment of so-called local diseases is as urgent now as it was in the time of Abernethy, when the practical surgeon could discourse most eloquently and sensibly of medicine and hygiene, and their applicability to so-called surgical diseases.

Gentlemen, believe me, this violent divorcement of medicine and surgery, and this parceling out of the minor departments of either, while they have their advantage in increasing our knowledge of realities and our appreciation of partial facts, have drawbacks, which sometimes the cupidity of man turns to advantage. I shall not speak of medicine. But in another department let me say, this is the age of meddlesome surgery. Whether it be an ulcer (and ulcers belong to surgery—in the os oris or uteri is all the same) which so often receives the unnecessary caustic; or the hæmorrhoid which so often receives the unnecessary ecraseur or ligature; or the stricture which receives the rarely, if ever, necessary urethro tome, there is no denying that the multiplying of instruments which render apparently the performance of an operation easier ministers to the desire to use them. He who carries a revolver trusts to it and may find use for it; while he who discards its use gets on safely without it.

This meddlesomeness, however, is most apparent in regions least visible. To what fingering and inspection are subjected those organs hidden deeply in the person of the female? How many men live and thrive on the sometimes real, but often fancied, ailments of those organs. It appears to me as if what was intended by nature to be most hidden has been brought into more prominent relief than any of, nay than all of, the organs of the body. Are we always honest? Are *ulcers* or other affections of the womb as frequent as women are led to believe. They are I think not so numerous in the same person as *some* are made to believe. A lady on her way through the city recently had occasion to consult me for some trifling ailment. When handing me a fee she told me of her attachment to her physician, and no wonder, for, as she added, "he has saved my life eighteen times!" I thought this an extraordinary number of times for her *Æsculapius* to have driven back the fell destroyer, but she at once explained in these words: "My doctor has cured me of eighteen ulcers all over the womb,—awful bad ones

too, I tell you,—some of them were very large. It cost me a pile of money, I assure you. I have just come back from Murray Bay, and I am anxious for my doctor to see how I am getting on." "But-madam," I ventured to suggest, "you have every appearance of health, and there can be no serious mischief now going on, with a general condition so satisfactory." "Oh! but these ulcers are awful bad things, and one might be eating away at the womb without one's perceiving it." I was quite relieved at not being asked to ascertain the condition of the womb, as I probably should have failed to detect what (I was charitable enough to think) her own physician would easily discover, a nineteenth and possibly not the last ulcer! Gentlemen, I believe we are not tainted in this city with that inordinate love of money, and all that it procures, to do that which is inconsistent with the elevated character of high-mindedness of the physician, or with the obligation imposed upon him when he stepped within the precincts of his present calling. But with the inducements that are held out, it requires no small amount of integrity and rectitude to enable the practitioner to follow out a course dictated by self-negation rather than interest; by magnanimity rather than by undue regard to private profit or advantage. It must not be supposed that I take exception to the existence of the special departments into which medicine and surgery, and chiefly the latter, are divided. The oculist and the aurist and the well-informed gynæcologist has each his place in the brotherhood of medicine. But he has not, he should not have, a place in that brotherhood unless he possessed a fair knowledge of *general* medicine and surgery. I can imagine no greater pest in society than the specialist who knows only the organ with the diseases of which his interests are bound up. He is apt to regard every ailment as connected in some way with the organ which has been treated by him in a pamphlet or periodical. It is now as it was in the time of Molière, and with less excuse.

What, perhaps, has contributed more than any thing else to this state of things is the circumstance that men before entering upon the study of medicine do not now receive the liberal education they once received. In the time of Samuel Johnson the physician was admittedly the best informed and best educated person to be met with in society. He was as familiar with Latin, and often with Greek, as with his native tongue. How is it now? Let the abstracts of the communications made in the

various sections in the recent International Medical Congress answer. There, at that babel of tongues, it was deemed necessary to prepare a synopsis in *three* modern languages, so that the great bulk of the members could perceive in his own language that wherewith he wished to familiarize himself, as if there was no common vehicle of intercourse in that language which has long been the language of the learned. It may be stated, as it is partially believed, that the time spent in acquiring this liberal education is wasted in the presence of work more useful and more profitable. But this is an error. If one country has contributed more than another, in recent times, to the advancement of every department of medical science, it is Germany. We have the recent testimony of Dr. John Struthers and others in favor of the greater completeness of their anatomical institutes; to the completeness of their teaching, and to the result in the large contributions which the anatomists of Germany have made in modern times to the progress of anatomical science in all its branches. Yet are the Germans at the same time the best educated nation in the world. If matters are now as when I was in Germany, I presume there was not a German at the Congress who could not read English or French or Latin as easily as his own deutsche sprache. How many Frenchmen could read (or would wish to read) German. How many English or Americans (out of the higher walks) could read either French or German? The fact that there was a widespread ignorance of classics may be gathered from the circumstance that it was not deemed advisable to put the abstracts in a language which might not be understood. One word more relating to the Congress.

You have all read in the different periodicals the remarkable statement of Dr. Keith as to the employment of carbolic spray in abdominal surgery, and you have all been more than amazed at the unexpected admission of Professor Lister. How true is the old Horatian adage, *nil admiratur*. For I know not at which to be most surprised, the enthusiasm with which Listerism was hitherto advocated as the *essential* feature in *all* surgical operations; or the admirable frankness with which its ablest defender has admitted that in one department, at least, of operative surgery it is *de trop*.

But, to return to our rooms at No. 14 Phillips square: In leaving the chair to which your kind partiality has assigned me, I have again to thank you for the honor you conferred upon me in elect-

ing me your President, and not for the first time, and for the uniform courtesy which has been extended to me by you all. I have to return also special thanks to our quiet, unobtrusive, but most efficient, Secretary, Dr. Edwards, for much valuable assistance. Our indefatigable Treasurer, also, Dr. Molson, will please accept my thanks for relieving me of much labor which a less energetic officer would have entailed upon me.

THE QUEEN *VERSUS* HUGH HAYVERN FOR THE MURDER OF JOHN SALTER.

MEDICAL AND LEGAL VIEWS OF INSANITY.

As usual, Doctors Differ.

By DR. HENRY HOWARD, Visiting Physician Longue Point Lunatic Asylum.

From the medical evidence given in this case, it is quite evident that the five doctors for the Crown not only differed from Doctors Henry Howard and Angus Macdonald, but they also differed from one another. This did not look as if the medical profession was a very scientific one, or as if medical men had any scientific data upon which to base their opinions. Some of them evidently based their opinions upon the writings of others, while Dr. Howard based his opinions chiefly upon his study of insanity, as he found it to develop itself in nature.

It appears that, at the request of Mr. Curran, Q.C., who defended the prisoner, Dr. Henry Howard undertook to examine into the mental state of Hugh Hayvern, and report to Mr. Curran his opinion of the man, as to whether he was, or was not, a man that was legally responsible for his acts, particularly for the act of which he stood accused of, the killing of John Salter.

What was Dr. Howard's course of procedure? First, to learn, as far as it was possible, the *history* of the man. Why did he do so? Because, according to his evidence, he maintains that a man's *conduct* gives very strong evidence as to whether he is sane or insane. He said no sane man *would*, not *could not*, live in the constant breach of all social and natural laws, particularly in the breach of the first natural law, self-preservation. He therefore wanted to find out by his enquiries if that Hayvern did or did not live in the breach of all social and natural laws.

He also wanted to discover what had been his physical state in childhood, maintaining that, if

epilepsy was developed, by fits, in childhood, although no such fits should be developed in manhood, yet there was always in the person an epileptic neurosis, *veiled epilepsy*, that influenced his character all through life, and rendered him subject to commit acts under the influence of an *uncontrollable impulse*.

He wished also to know if that the man had been an inebriate; and why? because he, Dr. Howard, had found from experience, those who have an epileptic neurosis, if inebriates, aggravate the epileptic neurosis; he goes further, and says that a long-continued course of inebriety will, of itself, establish an epileptic neurosis where it had not existed by heredity, and that it is common to find the children of inebriates epileptic, or otherwise maniacal. It was but natural for Dr. Howard to adopt the course he did to learn the man's history, seeing that he believes that a man's *conduct* gives proof of what is his mental organization. Dr. Howard stated in the Court that mind of man, as we know it, is the product of matter, as we define matter; in fact, that body and mind are one, and that insanity is *abnormal mind*, the product of *abnormal matter*,—in other words, that insanity was a symptom of a diseased state of a man's mental organization. Dr. Howard may be wrong, but no one can deny but his is a common-sense view of the question. He endeavored to sweep away all mystery with respect to mind, and pointedly stated that, if man's mind was not of the material order, he nor no other medical man would be justified in treating insanity as a disease.

An attempt was made in the Court to make it appear that Dr. Howard said the mind was the *soul*—this he at once repudiated through Mr. Curran, Q.C.

After Dr. Howard had obtained all the information he possibly could from private persons and police reports, and having read the evidence given at the Coroner's inquest, his next step was to visit the prisoner and make a personal examination of him. By his evidence it appears that he visited him at two different periods, and examined him physiologically, psychologically and pathologically, using all the means known to men of science, together with the knowledge he had acquired from nature during twenty years daily intercourse with the insane.

He then makes his exhaustive report to Mr. Curran, Q.C., which concludes as follows, and which he swears to before the Court:

"Judging the mental state of Hugh Hayvern by his *conduct*, by his *physiological* symptoms, by his *psychological* symptoms and by his *pathological* symptoms, I do not hesitate to declare him to be a man of an unsound mental organization; that he is intellectually and morally insane, and if he did kill Thomas Salter in the manner in which he is said to have done, he killed him while laboring under an insane, epileptiform, uncontrollable impulse, for which he is not responsible, and I consider the cause of his mental aberration to be due to three causes: 1st, his heredity; 2nd, to the fact of his being an inebriate from his youth up; and, 3rd, that it has been aggravated by his fall from the roof of the jail previous to his having committed the crime of which he is accused."

Dr. Angus Macdonald reads Dr. Howard's report, visits and examines the prisoner, and in his testimony before the Court entirely agrees with Dr. Howard, that the prisoner was insane when he committed the crime.

The Crown brought into Court five doctors to oppose the views held by Dr. Howard respecting the sanity of the prisoner. Dr. Pominville, the medical man of the Penitentiary, never examined into the man's mental state; Dr. Robillard did make an examination of the man; Drs. Vallée, Gardner and Cameron never saw the man except in the dock of the Court House, when on his trial. They shall all speak for themselves.

Dr. Pominville, speaking of the prisoner, "He was *taciturn* and *morose*, he was *debased morally* and *mentally*," not a bad description of an imbecile.

"Did not wish to pronounce an opinion in what is called uncontrollable impulse, but did not believe any such thing occurred in the prisoner's case."

He would not pronounce an opinion upon uncontrollable impulse, and in the same sentence does pronounce it against the prisoner.

"Thought on the 29th of June the prisoner was sane and knew *right* from *wrong*, although at the very moment the act was committed he might not have thought of either."

That is exactly uncontrollable impulse, *acting without thought*. The moment a man thinks he reasons, then impulse ceases, and *desire* takes its place; then, if insane, he acts from an uncontrollable insane *desire*. That is a distinction Dr. Howard has learned from his observation of nature, it is not to be found in books. But Dr. Pominville said the prisoner knew right from wrong. Dr. Howard never denied but that the prisoner knew right from wrong. But he maintained that the

knowledge of right and wrong was no test of sanity, for if so then the majority of those confined in insane asylums should be discharged. What he stated of the prisoner was that he committed the act under an uncontrollable, insane, epileptic impulse, and Dr. Pominville admitting that at the moment of the act the prisoner "might not have thought," recognized the uncontrollable impulse,—a clear contradiction to his first statement.

Dr. Howard from the beginning to the end of his evidence strongly maintained that a man was responsible not for his knowledge, but his *power* to do right, and in support of his theory quoted Drs. Maudsley, Bucknill and a host of other authorities.

DR. ROBILLARD'S EVIDENCE.

Speaking of the prisoner, "Witness came to the conclusion that he was a very wicked man with *greatly perverted morals*....Uncontrollable impulses were very rarely met with in *imbeciles* and *idiots*....Witness was of opinion that the prisoner was perfectly *conscious* of his act, but that immediately after he became greatly excited, and this fact moved his *dormant impulses*."

The man had *greatly perverted morals* with *dormant impulses*. If dormant impulses are not *unconscious* impulses, what are they? If his impulses were dormant when he committed the act, how could he be conscious of his act?

"Witness did not believe that *mind* was the product of the body."

If not, what is it? And if otherwise, why attempt to treat it with medicine?

"Witness is of opinion that the prisoner is a man in whom *all the noble attributes of his nature are wanting*."

What are these attributes if not *intelligence* and *morality*? What is an imbecile if it is not a person void of these qualities?

"Witness agreed with Dr. Howard that intellectual and moral insanity is the same."

Very good! but after describing the man as he described him, why not recognize that he described an insane imbecile?

DR. VALLEE'S EVIDENCE.

"Epileptic maniacs are considered the most dangerous; in cases of epileptic fits the *impulses are momentary*, the acts are automatic, *violent* and *without motive*."

Hayvern's act was *momentary* and *violent*, and there was no proof whatever of *motive*; on the contrary, the Crown proved that deceased and prisoner were good friends.

"*Imbeciles* are subject to these uncontrollable *impulses*."

A contradiction to Dr. Robillard.

"There are insane people, who appear sane to any one except to the physicians."

Just so. Why then were any but physicians brought forward on the part of the Crown to testify to the man's sanity?

"After hearing all the evidence produced at the trial, he was of opinion that the prisoner was not insane at the moment he committed the deed, and was perfectly able to distinguish between *right* and *wrong*."

From Dr. Vallée's standpoint that the *knowing right from wrong* is a proof of sanity, he could come to no other conclusion, for all through the trial Dr. Howard admitted the prisoner knew right from wrong, but denied that it was a test of sanity. He claimed that the act was committed by a man who knew right from wrong, under an insane, uncontrollable impulse.

DR. WILLIAM GARDNER'S EVIDENCE.

"There were no facts in the evidence to warrant witness in saying prisoner was an epileptic maniac or imbecile, but he is certainly *stupid* and of a *low order of intelligence*."

If being *stupid* and of a *low order of intelligence* does not constitute imbecility, what does?

"Witness is of opinion that the prisoner can distinguish between *right* and *wrong*."

The same story, recognizing right and wrong as a proof of sanity.

"It is possible to be partially insane or monomaniac."

Dr. Howard denied partial insanity, but recognized that, like unto any other disease, different degrees of severity and recurrent insanity, that is *sane* at one time, *insane* at another.

"Insomnia is not a sign of insanity."

Certainly not, when taken as a solitary symptom, for it is also very frequently a symptom of gout and dyspepsia, but what symptom is there of any disease that may not be found in another disease? It will be something new, however, for any one who ever had the charge of an asylum, or even an insane private patient, to learn that insomnia is not a symptom of insanity.

"Witness was *not* of opinion that all the isolated symptoms combined would *not* produce insanity."

What symptoms? Dr. Howard only gave the man's symptoms, and he gave them under oath. Now of two things one, Dr. Howard gave these symptoms honestly or dishonestly; if honestly, then Dr. Gardner would not say that the man was *not*

insane ; if dishonestly, then Dr. Howard—well, I don't believe Dr. Gardner would go so far as that.

But Dr. Gardner previously stated that, "there were no facts in the evidence to warrant him in saying prisoner was an epileptic maniac or imbecile. His first and last statements are certainly contradictory.

DR. JAMES C. CAMERON'S EVIDENCE.

"Having heard the evidence of Dr. Howard, he was of opinion that the prisoner was *not insane*, nor was he an *epileptic maniac*. Has heard nothing to prove that the prisoner was incapable of distinguishing *right* from *wrong* on the 29th of June last."

Hard for him when no one attempted to prove anything of the sort, so far as the question at issue he and his confreres might just as well have said they heard nothing to prove that the man was not able to walk on the 29th of June last, and they might just as truly have said that his being able to walk was a proof of sanity, as that his *knowing right* from *wrong* was a proof of sanity. There are medical men who have said things just as strange and with, very nearly, as evil results.

Here have been four medical men, in opposition to Drs. Howard and MacDonald, in opposition to the highest medical and legal authorities in Europe and on the continent of America, impressing upon the *court* and *jury* that the unfortunate prisoner at the bar was sane because he knew, or was assumed to know, right from wrong ; and on this exploded theory the Counsel for the Crown calls upon the jury to find the prisoner guilty, and on this exploded theory the Court charges against the prisoner, and no doubt but that, upon this exploded theory, the jury found the prisoner guilty. The Counsel for the Crown, the Court and jury could not do otherwise than they did, after four medical men *recognizing* that the knowledge of *right* from *wrong* was a proof that the man was sane.

Under such circumstances it was fruitless for Dr. Howard and the Counsel for the prisoner to expect that the jury would recognize that a man who, assumedly, knew right from wrong, could kill a man under an *insane, uncontrollable impulse*. But as judges and juries have come to recognize the truthfulness of insane, uncontrollable impulse, and insane, uncontrollable *desire* and *actions* in England, and every other country in Europe, as also in the United States of America, so will they, *in time*, come to recognize these truths in every Province in the Dominion of Canada.

It may be said that these four medical men, by stating in their evidence that the prisoner knew right from wrong, did not by so doing bind themselves to the theory that the knowledge of right from wrong proved a man to be sane. I do not believe that any one of these gentlemen would condescend to so mean a quibble, or such a dishonorable course ; the case was one of life or death, and they each and all by their stating that they believed the man knew right from wrong on the day the murder was committed, without qualifying the expression in the slightest degree, knew that the Judge and jury accepted their statements to mean that a man who knew right from wrong must, from that fact, be a sane man, and because the prisoner at the bar knew right from wrong he was, therefore, a sane man.

So much, Mr. Editor, as you know, had been written before your editorial in your issue for October, I now expect you will do me the justice of permitting me to add the following, for your editorial has done Hayvern great injustice, all my quotations shall be from the *Gazette*.

"AUDI ALTERAM PARTEM."

When I read your very ingenious article, in the October number of your Journal, on "THE HAYVERN MURDER CASE," my first feelings were of indignation. That you see was *impulse*, but not uncontrollable. I think it was due to bile, for my liver was a little out of order for a few days, and I need not tell you how that affects a man's mental organization and renders him impulsive ; but I overcame the impulse immediately and appealed to reason, the result of which was that I put my scientific theory into practice. You know what that theory is, that every man is what he is in virtue of his mental organization, whether he be a bad man, or mad man, a good man, a knave, a fool or a sage. But when I reasoned and remembered my theory I no longer felt indignant, for I knew you had acted in obedience to your mental organization.

No doubt, when you were writing that article, it never struck you that it might be possible that to an ordinary person your Editorial would appear as if you were afraid the Executive would show *mercy* to the unfortunate man, who is what he is in virtue of HIS mental organization.

Speaking of the prisoner you say :

"Throughout the trial he seemed *indifferent* and *unconcerned*, chewing tobacco vigorously, nevertheless he watched the proceedings closely,

and occasionally *darted quick furtive glances at the Jury.*"

It appears to me that you contradict yourself in these few lines. At all events I fail to see what you as a medical journalist had to do in making such a statement. I suspect you were the only observer in the Court who was *sharp* enough to see those *quick furtive glances*. Strange that the Court did not observe them, nor Mr. Davidson, the learned Counsel for the Crown, did not observe these *glances*, for no doubt if they did they would have drawn the attention of the Jury to that important fact.

"The St. Vincent de Paul convicts dread being transferred to the Kingston Penitentiary. Hayvern *suspected Salter* of trying to secure his removal thither."

Where on earth did you obtain that information? Certainly not when the man was on his trial.

I have the *Gazette* before me, and I find no such evidence has been reported; moreover, neither his Honor Judge Monk, nor Mr. Davidson, ever made such a statement to the Jury; on the contrary, Mr. Davidson said: "True, there were some *minor circumstances which had not been clearly established.*" But this is a *major* circumstance, and instead of its being established, it was actually established by the evidence of the Crown that Hayvern and Salter were good friends.

Speaking of the knife you say, "An old file ground down to a fine point was fixed in a *rough* wooden handle."

Another gratuitous statement. No one even *attempted* to prove that the knife was made from an old file, and instead of a rough wooden handle, the acting Warden distinctly stated that, seeing the handle was the handle of a shoe-maker's knife, he thought it was a shoe-maker's knife.

"He voluntarily told the Warden that he had stabbed Salter with a knife, and that he had done for Salter."

I never heard the Warden make such a statement, it is not reported, and it is not in the Warden's evidence before the Coroner's Jury. Neither his Honor Judge Monk, nor Mr. Davidson, Q.C., made such a statement to the Jury.

"When asked for the knife he *brandished* it in a threatening manner."

Again I ask, where or in whose evidence does the *brandishing* appear? Some said he attempted to conceal it in the sleeve of his coat, some that

he carried it in one position and some in another, but this is the first I have heard of *brandishing*.

Were I to go into the statements you have made respecting the evidence of the Rev. Father Knox and myself, I could just as easily show how absurdly you have represented both the one and the other. But I forbear. I will, however, relate you a little incident that occurred to me in early life, forty two-years ago—I was then two years in practice. The Criminal Court was opened in Carrick on Shannon, Co. of Leitrim, Ireland. The Presiding Judge was LORD CHIEF JUSTICE BALL. I was brought forward by the Crown to give evidence in a case, *The Queen versus ———*, for the murder of her child. I proved to the satisfaction of the Court and Jury that the child was born alive, had not been killed, but came to its death from want of proper care after birth. The woman instead of being, as she was accused of, found guilty of murder, was simply found guilty of concealment of the birth of a child under mitigating circumstances, and only got three months imprisonment. Now, through some busy person it came to the knowledge of the Attorney General that at the time of the inquest the woman had made some confession to me, and when under examination the Attorney General asked me if it was not true that the woman made a confession to me. I answered, "Yes." "Tell the Court and Jury, Dr. Howard, what was that confession." I refused; the Attorney General called upon his Lordship to compel me or imprison me for contempt of Court. His Lordship threatened me, I respectfully persisted in refusing. I said, "My Lord, I have proved that the child was born alive and how it came by its death. I have proved that the prisoner at the Bar on the day of the inquest had been very lately a mother. All that knowledge I obtained in my capacity of a professional man. After the inquest was over the poor woman consulted me as a professional man, she then became my patient. When I received my diploma, I swore to keep the secrets of my patients, therefore, your Lordship, I cannot and will not tell what that woman as such confessed to me." I was not sent to prison, but complimented by his Lordship for having acted as I did, and he said I was *right* maintaining my action, and his Lordship added: "I regret to say that too frequently I find medical men, when giving evidence on the part of the Crown, acting as if it were their duty to assist in having the accused *convicted*. Such is not the duty

of a medical man, his duty simply is to give his evidence without any such feeling. If he has any feeling in the matter at all, it should be the wish to see the prisoner proved innocent."

Four months after I received a letter from my friend Sir William Wilde, stating that on that day he was present in the Four Courts in Dublin, where there was a full bench of Judges, and the question under discussion was: If a medical man could refuse, in Court, to reveal a professional secret, and the case in Carrick on Shannon, of Dr. Henry Howard having refused, and been sustained by the presiding Judge, Lord Chief Justice Ball, was quoted as a precedent, and from that day to the present no medical man has been called upon in Ireland by the Crown under any circumstances to tell the secret of his patient, although before that it was a common occurrence.

You and the readers of your Journal will see the *moral*.

I regret I have not been as successful in the case under consideration. There is no precedent yet in Canada that a man can be controlled in his acts by an *insane impulse*, or that a man can be insane and *know right from wrong*. But the time will come when these truths will be recognised.

Progress of Medical Science.

Record of the Post-mortem Examination of the Body of President J. A. Garfield, made September 20, 1881, commencing at 4.30 P.M., eighteen hours after death, at Franklyn Cottage, Elberon, New Jersey.

(From the *New York Medical Record*.)

Present and assisting: Dr. D. W. Bliss, Surgeon-General J. K. Barnes, U. S. Army, Surgeon J. J. Woodward, U. S. Army, Dr. Robert Reyburn, Dr. Frank H. Hamilton, Dr. D. Hayes Agnew, Dr. Andrew H. Smith, of Elberon (and New York), and Acting Assistant Surgeon D. S. Lamb, of the Army Medical Museum, Washington, D. C.

Before commencing the examination, a consultation was held by these physicians in a room adjoining that in which the body lay, and it was unanimously agreed that the dissection should be made by Dr. Lamb, and that Surgeon Woodward should record the observations made. It was further unanimously agreed that the cranium should not be opened. Surgeon Woodward then proposed that the examination should be conducted as follows:

That the body should be viewed externally, and any morbid appearances existing recorded; that a

catheter should then be passed into the wound, as was done during life, to wash it out, for the purpose of assisting to find the position of the bullet; that a long incision should next be made from the superior extremity of the sternum to the pubes, and this crossed by a transverse one just below the umbilicus; that the abdominal flaps thus made should then be turned back and the abdominal viscera examined; that after the abdominal cavity was opened the position of the bullet should be ascertained, if possible, before making any further incision; and that, finally, the thoracic viscera should be examined.

This order of procedure was unanimously agreed to.

The examination was then proceeded with, and the following *external appearances* were observed:

The body was considerably emaciated, but the face was much less wasted than the limbs. A preservative fluid had been injected by the embalmer, a few hours before, into the left femoral artery. The pipes used for the purpose were still in position. The anterior surface of the body presented no abnormal appearances, and there was no ecchymosis or other discoloration of any part of the front of the abdomen.

Just below the right ear, and a little behind it, there was an oval ulcerated opening, about half an inch long in diameter, from which some sanious pus was escaping, but no tumefaction could be observed in the parotid region.

A considerable number of purpura-like spots were scattered thickly over the left scapula, and thence forward as far as the axilla. They ranged from one-eighth to one-fourth of an inch in diameter, were slightly elevated and furfuraceous on the surface, and many of them were confluent in groups of two to four or more. A similar, but much less abundant eruption was observed sparsely scattered over the corresponding region on the right side.

An oval excavated ulcer about an inch long, the result of a small carbuncle, was seated over the spinous process of the tenth dorsal vertebra. Over the sacrum there were four small bed-sores, the largest about half an inch in diameter. A few acne pustules, and a number of irregular spots of post-mortem hypostatic congestion were scattered over the shoulders, back, and buttocks. The inferior part of the scrotum was much discolored by hypostatic congestion. A group of hemorrhoidal tumors, rather larger than a walnut, protruded from the anus.

The depressed cicatrix of the wound made by the pistol-bullet was recognised over the tenth intercostal space, three and one-half inches to the right of the vertebral spines. A deep linear incision (made in part by the operation of July 24th, and extended by that of August 8th) occupied a position closely corresponding to the upper border of the right twelfth rib. It commenced posteriorly about two inches from the vertebral spines, and extended forward a little more than three inches. At the anterior extremity of this incision there was

a deep, nearly square abraded surface about an inch across.

A well-oiled flexible catheter, fourteen inches long, was then passed into this wound, as had been done to wash it out during life. More resistance was at first encountered than had usually been the case, but after several trials the catheter entered, without any violence, to its full length. It was then left in position, and the body disposed supinely for the examination of the viscera.

The *cranium* was not opened.

A long incision was made from the superior extremity of the sternum to the pubis, followed by a transverse incision crossing the abdomen just below the umbilicus. The four flaps thus formed were turned back and the abdominal viscera exposed. The subcutaneous adipose tissue divided by the incision was little more than one-eighth of an inch thick over the thorax, but was thicker over the abdomen, being about one-fourth of an inch thick along the linea alba, and as much as one-half inch thick toward the outer extremity of the transverse incision.

On *inspection of the abdominal viscera in situ*, the transverse colon was observed to lie a little above the line of the umbilicus. It was firmly adherent to the anterior edge of the liver. The greater omentum covered the intestines pretty thoroughly from the transverse colon almost to the pubes. It was still quite fat, and was very much blackened by venous congestion. On both sides its lateral margins were adherent to the abdominal parietes opposite the eleventh and twelfth ribs. On the left side the adhesions were numerous, firm, well organised, and probably old.* On the right side there were a few similar adhesions, and a number of more delicate and probably recent ones.

A mass of black, coagulated blood covered and concealed the spleen and the left margin of the greater omentum. On raising the omentum it was found that this blood mass extended through the left lumbar and iliac regions and dipped down into the pelvis, in which there was some clotted blood and rather more than a pint of bloody fluid.* The blood-coagula having been turned out and collected, measured very nearly a pint. It was now evident that secondary hemorrhage had been the immediate cause of death, but the point from which the blood had escaped was not at once apparent.

The omentum was not adherent to the intestines, which were moderately distended with gas. No intestinal adhesions were found other than those between the transverse colon and the liver, already mentioned.

The abdominal cavity being now washed out as thoroughly as possible, a fruitless attempt was made

*These adhesions, and the firm ones on the right side, as well as those of the spleen, possibly date back to an attack of chronic dysentery, from which the patient is said to have suffered during the civil war.

* A large part of this fluid had probably transuded from the injecting material of the embalmer.

to obtain some indication of the position of the bullet before making any further incision. By pushing the intestines aside, the extremity of the catheter, which had been passed into the wound, could be felt between the peritoneum and the right iliac fascia; but it had evidently doubled upon itself, and, although a prolonged search was made, nothing could be seen or felt to indicate the presence of the bullet, either in that region or elsewhere.

The abdominal viscera were then carefully removed from the body, placed in suitable vessels, and examined *seriatim*, with the following results:

The adhesions between the liver and the transverse colon proved to bound an *abscess-cavity* between the under-surface of the liver, the transverse colon, and the transverse mesocolon, which involved the gall-bladder, and extended to about the same distance on each side of it, measuring six inches transversely and four inches from before backward. This cavity was lined by a thick pyogenic membrane, which completely replaced the capsule of that part of the under-surface of the liver occupied by the abscess. It contained about two ounces of greenish yellow fluid—a mixture of pus and biliary matter. This abscess did not involve any portion of the substance of the liver except the surface with which it was in contact, and no communication could be detected between it and any part of the wound.

Some recent peritoneal adhesions existed between the upper surface of the right lobe of the liver and the diaphragm. The *liver* was larger than normal, weighing eighty-four ounces; its substance was firm, but of a pale, yellowish color on its surface and throughout the interior of the organ from fatty degeneration. No evidence that it had been penetrated by the bullet could be found, nor were there any abscesses or infarctions in any part of its tissue.

The *spleen* was connected to the diaphragm by firm, probably old, peritoneal adhesions. There were several rather deep congenital fissures in its margins, giving it a lobulated appearance. It was abnormally large, weighing eighteen ounces; of a very dark lake-red color both on the surface and on section. Its parenchyma was soft and flabby, but contained no abscesses or infarctions.

There were some recent peritoneal adhesions between the posterior wall of the *stomach* and the posterior abdominal parietes. With this exception no abnormalities were discovered in the stomach or *intestines*, nor were any other evidences of general or local peritonitis found besides those already specified.

The *right kidney* weighed six ounces, the *left kidney* seven. Just beneath the capsule of the left kidney, at about the middle of its convex border, there was a little abscess one-third of an inch in diameter, and there were three small serous cysts on the convex border of the right kidney, just beneath the capsule; in other respects the tissue of both kidneys was normal in appearance and texture.

The *urinary bladder* was empty.

Behind the right kidney after the removal of that organ from the body, the dilated *track of the bullet* was dissected into. It was found that from the point at which it had fractured the right eleventh rib (three and one-half inches to the right of the vertebral spines) the missile had gone to the left, obliquely forward, passing through the body of the first lumbar vertebra and lodging in the adipose connective tissue immediately below the lower border of the pancreas, about two and one-half inches to the left of the spinal column, and behind the peritoneum. It had become completely encysted.

The track of the bullet between the point at which it had fractured the eleventh rib and that at which it entered the first lumbar vertebra was considerably dilated, and the pus had burrowed downward through the adipose tissue behind the right kidney, and thence had found its way between the peritoneum and the right iliac fascia, making a descending channel which extended almost to the groin. The adipose tissue behind the kidney in the vicinity of this descending channel was much thickened and condensed by inflammation. In the channel, which was found almost free from pus, lay the flexible catheter introduced into the wound at the commencement of the autopsy; its extremity was found doubled upon itself, immediately beneath the peritoneum, reposing upon the iliac fascia, where the channel was dilated into a pouch of considerable size. This long descending channel, now clearly seen to have been caused by the burrowing of pus from the wound, was supposed during life to have been the track of the bullet.

The last dorsal, together with the first and second lumbar vertebra and the twelfth rib, were then removed from the body for more thorough examination.

When this examination was made, it was found that the bullet had penetrated the first lumbar vertebra in the upper part of the right side of its body. The aperture by which it entered involved the intervertebral cartilage next above, and was situated just below and anterior to the intervertebral foramen, from which its upper margin was about one-fourth of an inch distant. Passing obliquely to the left, and forward through the upper part of the body of the first lumbar vertebra, the bullet emerged by an aperture, the centre of which was about one-half inch to the left of the median line, and which also involved the intervertebral cartilage next above. The cancellated tissue of the body of the first lumbar vertebra was very much comminuted and the fragments somewhat displaced. Several deep fissures extended from the track of the bullet into the lower part of the body of the twelfth dorsal vertebra. Others extended through the first lumbar vertebra into the intervertebral cartilage between it and the second lumbar vertebra. Both this cartilage and that next above were partly destroyed by ulceration. A number of minute fragments from the fractured lumbar vertebra had been driven into the adjacent soft parts.

It was further found that the right twelfth rib also was fractured at a point one and one-fourth inch to the right of the transverse process of the twelfth dorsal vertebra; this injury had not been recognized during life.

On sawing through the vertebra, a little to the right of the median line, it was found that the spinal canal was not involved by the track of the ball. The spinal cord, and other contents of this portion of the spinal canal, presented no abnormal appearances. The rest of the spinal cord was not examined.

Beyond the first lumbar vertebra, the bullet continued to go to the left, passing behind the pancreas to the point where it was found. Here it was enveloped in a firm cyst of connective tissue, which contained, besides the ball, a minute quantity of inspissated, somewhat cheesy, pus, which formed a thin layer over a portion of the surface of the lead. There was also a black shred adherent to a part of the cyst-wall, which proved, on microscopical examination, to be the remains of a blood-clot. For about an inch from this cyst the track of the ball behind the pancreas was completely obliterated by the healing process. Thence, as far backward as the body of the first lumbar vertebra, the track was filled with coagulated blood, which extended on the left into an irregular space rent in the adjoining adipose tissue behind the peritoneum and above the pancreas. The blood had worked its way to the left, bursting finally through the peritoneum behind the spleen into the abdominal cavity. The rending of the tissues by the extravasation of this blood was undoubtedly the cause of the paroxysms of pain which occurred a short time before death.

This mass of coagulated blood was of irregular form, and nearly as large as a man's fist. It could be distinctly seen from in front through the peritoneum, after its sight behind the greater curvature of the stomach had been exposed by the dissection of the greater omentum from the stomach, and especially after some delicate adhesions between the stomach and the part of the peritoneum covering the blood mass had been broken down by the fingers. From the relations of the mass as thus seen it was believed that the hemorrhage had proceeded from one of the mesenteric arteries, but as it was clear that a minute dissection would be required to determine the particular branch involved, it was agreed that the infiltrated tissues and the adjoining soft parts should be preserved for subsequent study.

On the examination and dissection made in accordance with this agreement, it was found that the fatal hemorrhage proceeded from a rent, nearly four-tenths of an inch long, in the main trunk of the splenic artery, two and one-half inches to the left of the coeliac axis. This rent must have occurred at least several days before death, since the everted edges in the slit in the vessel were united by firm adhesions to the surrounding connective tissue, thus forming an almost continuous wall

bounding the adjoining portion of the blood-clot. Moreover, the peripheral portion of the clot in this vicinity was disposed in pretty firm concentric layers. It was further found that the cyst below the lower margin of the pancreas, in which the bullet was found, was situated three and one-half inches to the left of the coeliac axis.

Besides the mass of coagulated blood just described, another, about the size of a walnut, was found in the greater omentum, near the splenic extremity of the stomach. The communication, if any, between this and the larger hemorrhagic mass could not be made out.

The examination of the *thoracic viscera* resulted as follows :

The *heart* weighed eleven ounces. All the cavities were entirely empty except the right ventricle, in which a few shreds of soft, reddish, coagulated blood adhered to the internal surface. On the surface of the mitral valve there were several spots of fatty degeneration ; with this exception the cardiac valves were normal. The muscular tissue of the heart was soft, and tore easily. A few spots of fatty degeneration existed in the lining membrane of the aorta just above the semilunar valves, and a slender clot of fibrin was found in the aorta, where it was divided, about two inches from these valves for the removal of the heart.

On the right side slight pleuritic adhesions existed between the convex surface of the lower lobe of the lung and the costal pleura, and firm adhesions between the anterior edge of the lower lobe, the pericardium, and the diaphragm. The *right lung* weighed thirty-two ounces. The posterior part of the fissure, between its upper and lower lobes, was congenitally incomplete. The lower lobe of the right lung was hypostatically congested, and considerable portions, especially toward its base, were the seat of broncho pneumonia. The bronchial tubes contained a considerable quantity of stringy muco-pus ; their mucous surface was reddened by catarrhal bronchitis. The lung-tissue was cedematous,* but contained no abscesses or infarctions.

On the left side the lower lobe of the lung was bound behind to the costal pleura, above to the upper lobe, and below to the diaphragm, by pretty firm pleuritic adhesions. The *left lung* weighed twenty-seven ounces. The condition of the bronchial tubes and of the lung-tissue was very nearly the same as on the right side, the chief difference being that the area of the broncho-pneumonia in the lower lobe was much less extensive in the left lung than in the right. In the lateral part of the lower lobe of the left lung, and about an inch from its pleural surface, there was a group of four minute areas of gray hepatization, each about one-eighth of an inch in diameter. There were no infarctions and no abscesses in any part of the lung-tissue.

The surgeons assisting at the autopsy were unanimously of the opinion that, on reviewing the history

of the case in connection with the autopsy, it is quite evident that the different suppurating surfaces, and especially the fractured spongy tissue of the vertebra, furnish a sufficient explanation of the septic conditions which existed during life.

About an hour after the post-mortem examination was completed the physicians named at the commencement of this report assembled for further consultation in an adjoining cottage ; a brief outline of the results of the post-mortem examination was drawn up, signed by all the physicians, and handed to private secretary J. Stanley Brown, who was requested to furnish copies to the newspaper press.

(Signed)

D. W. BLISS,
J. K. BARNES,
J. J. WOODWARD,
ROBERT REYBURN,
D. S. LAMB.

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Pharmacy

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THE HAYVERN MURDER CASE.

We publish in this number of the RECORD an article by Dr. Henry Howard on the Hayvern murder case, which demands something more than a passing notice. We might reasonably have expected to find in a communication of such length a clear exposition of Dr. Howard's views, and a detailed report of the clinical facts upon which his extraordinary diagnosis of insanity was based. We regret, however, that he has preferred misrepresentations and sweeping assertions, theories and vague generalities, to the calm statement and discussion of scientific facts. We are surprised that "*indignation*" and "*bile*" could have made Dr. Howard so forgetful of his dignity and self-respect as to stoop to personalities so unbecoming to a scientific and educated gentleman. The psychological question, as to whether the writer of our October editorial is "*a bad man or madman, a good man, a knave, a fool, or a sage,*"

* A part, at least, of this condition was doubtless due to the extravasation of the injecting fluid used by the embalmer.

throws very little light upon the Hayvern case, and does not add to the scientific value of Dr. Howard's communication ; at all events, whether bad or mad, fool or knave, we retain sufficient respect for ourselves, our profession, and our Journal, to refrain from unbecoming and uncalled-for personal attacks.

Dr. Howard asserts that our "*very ingenious*" editorial contains misrepresentations and contradictions, and does Hayvern "*great injustice.*" His criticisms are based entirely upon the report of the trial which appeared in the *Montreal Gazette*. Unfortunately, in the Montreal criminal courts, there is no authorized or official report of proceedings ; we have to depend solely upon the newspaper accounts, which are always more or less imperfect. In this case the *Gazette*, *Herald*, *Star*, and *Witness* have reports, none of them perfect, yet collectively giving a fair idea of the evidence. The *Gazette* report is, on the whole, the most complete and accurate, except in the matter of Dr. Howard's own evidence. When Dr. Howard entered the witness box, he held in his hand a voluminous document, which was promptly challenged by Mr. Davidson and disallowed by the Court. The *Gazette* account may be a faithful report of that document, and may contain the evidence which Dr. Howard *intended* to give ; but most certainly it is not an accurate report of the evidence which Dr. Howard actually *did* give in open Court. A glance at the reports of the four papers will readily demonstrate many differences, both in matter and manner, especially in the cross-examination. We will examine Dr. Howard's criticisms *seriatim* :—

1. He discovers contradiction in our statement that the prisoner seemed indifferent and unconcerned, yet watched the proceedings closely, and darted furtive glances at the jury.

We fail to see the contradiction implied by *seeming* unconcern and close scrutiny. However, if he turns to the *Gazette* report of Dr. Vallée's evidence he will find :

"Witness had observed the appearance in court of the prisoner, and had found that he manifested a great indifference ; but at moments when pointed remarks were made witness observed that prisoner paid greater attention."

Momentary flashes of interest and quick furtive glances, which were occasionally observed during the examination of witnesses, became most noticeable while Mr. Davidson was addressing the jury ; these furtive glances were the subject of remark

among several gentlemen present, who, unlike Dr. Howard, were "*sharp enough*" to detect them. More than once the remark was made that the prisoner seemed to be more knave than fool. When Mr. Curran, in his address to the jury, graphically painted the prisoner's life of crime, and referred in touching terms to the grief of the poor heart-broken mother, prisoner's seeming indifference entirely broke down ; he bowed his head upon the dock, and sobbed like a child. When the jury rendered their verdict of guilty, Mr. Curran quickly turned around to the prisoner and said to him : "When you are asked if you have anything to say for yourself, say nothing." "All right," was the quick reply ; and when Mr. Schiller asked him the usual question, if he had anything to say why sentence of death should not be passed, prisoner replied quite unconcernedly, "I have got nothing to say." If time and space permitted, many more incidents of the trial might be given to bear out our statement that the prisoner *seemed* indifferent and unconcerned, yet watched the proceedings closely. Did it ever suggest itself to Dr. Howard that Hayvern's dogged and sullen indifference might have been feigned? In this connection it must not be forgotten that the prisoner's chances of life depended largely upon his bearing out Dr. Howard's diagnosis of imbecility, both by looks and actions.

2. While it is a well-known fact that the St. Vincent de Paul convicts dread being removed to Kingston, Dr. Howard cannot see where we have grounds for the assertion that "Hayvern suspected Salter of trying to secure his removal thither."

JEAN BUERE, a guard, (vide *Gazette*) says :—

"Prisoner subsequently told witness, in answer to his question, that he had used his knife on Salter at the end of the stairway leading to the Protestant chapel, and that he had done so, *because Salter wanted to send him to Kingston* ; prisoner also said that there were other reasons behind, than that one."

REV. FATHER KNOX (vide *Gazette*) says :

"Referring to the *Kingston Penitentiary*, prisoner said *he would never go there* ;" also, "The prisoner while in his cell acted very foolishly, talking to himself, and especially so about *Kingston* ;" also, "Heard him mention *Kingston* several times, also the word *quiet*."

3. In support of our "gratuitous statement," that the knife was fashioned from an old file and

was fastened in a rough wooden handle, we quote again from the *Gazette* report.

TELESPHORE OUMET, acting deputy warden, says :—

"The knife must have been made at the blacksmith's shop in the Penitentiary, as it had been wrought out of a *file*." The handle of a shoemaker's knife is a rough wooden handle, in contradistinction to the horn, bone, and ivory handles usually found upon cutlery.

4. In support of the statement, "He voluntarily told the warden that he had stabbed Salter with a knife, and that he had done for Salter," we find H. B. MACKAY, acting warden (*vide Star*), testifying :—

"Said to him that I did not think Salter badly hurt; prisoner said he thought he was; he then said *he had stabbed Salter with the knife*." According to the *Witness* report, the acting warden says :—"Prisoner said to him of his own accord that *he had stabbed Salter with the knife*." Although not definitely reported in the papers, the acting warden did testify that Hayvern voluntarily said that he had "*done for Salter*."

5. In proof of Hayvern's "*brandishing the knife in a threatening manner*,"

H. B. MCKAY (*vide Witness*) says :—

"Witness then went and himself asked prisoner for the knife; he took it out of his pocket and *held it up in a threatening manner*, saying that the only way to get it was to fire upon him with a revolver."

These are the grave mis-statements and inaccuracies of which Dr. Howard so indignantly complains—how justly, we leave our readers to decide. Having thus shewn to his own satisfaction the inaccuracy of our editorial, Dr. Howard considerably refrains from further criticism, naively adding that he "could just as easily show how absurdly" we have "misrepresented" himself and the Rev. Father Knox.

In the first part of his article, Dr. Howard criticises the evidence of Drs. Pominville, Robillard Vallée, Gardner, and Cameron, and attempts to make it appear that they differed among themselves as to the mental condition of the prisoner. Dr. Howard's running commentary upon the evidence of these gentlemen is unanswerable, for the best of all reasons, that there is so little in it to answer. The *Gazette* report of Dr. Gardner's evidence is inaccurate; by omitting the first "not" in the

sentence quoted by Dr. Howard, the report becomes substantially correct, and then reads as follows :

"Witness was of opinion that all the isolated symptoms combined would not produce (or constitute) insanity."

Instead of disagreeing, as Dr. Howard asserts, these gentlemen unanimously testified that in their opinion the prisoner was neither an imbecile nor an epileptic maniac, and that the murder was not due to an uncontrollable impulse or an attack of epilepsy. They agreed with Drs. Howard and McDonald that, when the murder was perpetrated, the prisoner was able to distinguish between right and wrong. And here we must emphatically protest against the unfair manner in which Dr. Howard seeks to force these medical men into a false position and bind them down to a theory which every tyro in medicine knows to be untenable. A direct question was put to them—"From the evidence you have heard in court do you consider that on the 29th of June the prisoner was able to distinguish between right and wrong with respect to the murder of Salter?" A direct question demands a direct answer; accordingly they replied, like Drs. Howard and McDonald, that, in their opinion, the prisoner was, at that time, capable of distinguishing between right and wrong as to that particular act. What else could they say? They were not asked whether the knowledge of right and wrong was a test of sanity; they were not asked what in their opinion ought to be the test of a man's legal sanity and responsibility. They neither knew nor were supposed to know, by what legal interpretation of the scientific facts submitted in evidence the Court intended to determine Hayvern's legal sanity or insanity. They simply gave their opinion as to prisoner's knowledge of right and wrong when he murdered Salter, in reply to a direct question, just as they gave their opinions upon his imbecility, epileptic mania and uncontrollable impulse. But Dr. Howard says, because these medical men testified that, in their opinion, Hayvern knew right from wrong when he murdered Salter, they bind themselves to the opinion that every man who knows right from wrong is sane, and that no man who knows right from wrong can be insane. Is this a fair deduction? None of these gentlemen enunciated such preposterous views, and yet Dr. Howard unjustly strives to pin them down to such a theory; if they seek to repudiate his

assumption, he accuses them of quibbling and dishonorable action.

So much for Dr. Howard's criticisms; now let us briefly consider his diagnosis of Hayvern's mental condition and his theory of the murder. Hayvern is pronounced to be "an *imbecile* of a low order and an *epileptic maniac*."

His mental aberration is said to be due to three causes:

1. Heredity.
2. Inebriety from youth up.
3. A fall from the jail roof aggravating his condition.

In explanation of the murder, Dr. Howard advances two separate theories:

1. That the deed was committed during or directly after an attack of *petit mal*, when the prisoner was unconscious of what he did, and, therefore, not responsible for his acts.

2. That the deed was motiveless, unpremeditated, and the result of an *uncontrollable impulse*, which he was conscious of, but could not resist. In Dr. Howard's own words, "It was just such an impulsive act as an insane man with a homicidal tendency would commit."

It will thus be readily seen that Dr. Howard's views of the case are confused and contradictory. Moreover, his diagnosis of insanity and his theories of the murder are not borne out by facts, but are based upon a number of glaring assumptions, which we will now consider in detail.

1. *Heredity*—This has been presumed, not demonstrated. From the evidence it appears that prisoner's father and mother, brother and two sisters are living. They were spoken of as "decent, respectable people." Neither epilepsy, insanity, inebriety or any other neurotic disease was proved to have existed in any of them. Prisoner's married sister, however, has a child suffering from *chorea*. Can Dr. Howard really mean to hang his plea of *heredity* on such a slender thread? Is that fact sufficient to justify his opinion that "the prisoner was born with the epileptic neurosis in him?"

2. *Epilepsy*—The diagnosis of epilepsy was based upon the examinations made on the 26th and 31st of August, without reference to the history of prisoner's early life. Dr. Howard in cross-examination distinctly admitted to Mr. Davidson, that he had not heard of prisoner's "fits" in childhood, until he learned of their existence from Mrs. Hayvern in Court. In the

Star report of Dr. Howard's evidence we find:—

"Did not know until evidence was heard in Court that prisoner was an epileptic, but from the examination which witness made he at once came to the conclusion that such was the case."

Dr. Howard, therefore, assumed the existence of epilepsy from his physical examination of the prisoner, although he had never seen him in a fit, nor even heard of his having had one. He did not trouble himself to substantiate such an important matter by a strict enquiry into the early history of the prisoner, but quietly assumed the existence of epilepsy, of which he obtained no proof until he heard Mrs. Hayvern's evidence in Court. The *fits* in childhood he at once assumed to have been *epileptic*, although no medical man had ever been consulted with regard to them, and no adequate proof brought forward as to their epileptic character. We find it difficult to reconcile Dr. Howard's ignorance of the fits in childhood with the fourth paragraph of his article, which reads,

"He also wanted to discover what had been his physical state in childhood, maintaining that if epilepsy was developed by fits in childhood..... there was always in the person an epileptic neurosis."

In the light of Dr. Howard's admission, this reads very like an after-thought.

3. *Inebriety from youth up* is assumed to be another cause of prisoner's mental aberration. Having so easily presumed a hereditary neurotic tendency, and so skilfully assumed the actual existence of epilepsy in young Hayvern, Dr. Howard does not find the slightest difficulty in still further assuming that inebriety aggravated this epileptic tendency. But he goes further: he holds that, even although no hereditary tendency existed, a long continued course of inebriety might have established the epileptic neurosis. If he had proved inebriety in Hayvern's parents, we could have seen the force of his argument; we hardly think that Dr. Howard means us to believe, that a young man of twenty-eight, having no neurotic tendency, would have, by inebriety, set up the epileptic neurosis in himself.

4. *The fall from the jail roof* is assumed to have aggravated the assumed epileptic tendency. It did not matter though the medical officer of the penitentiary never noticed any ill effects from the fall, other than ordinary bruises and lameness; it did not matter though doctor, wardens, guards,

attendants and fellow-prisoners never remarked any symptoms which could be interpreted into even a semblance of epilepsy: of course it did not matter, because the epilepsy might never have manifested itself, it might have been "*veiled*;" this brings us to another assumption.

5. According to Dr. Howard, if epileptic convulsions occur in childhood, the epileptic neurosis is always developed and "can never be improved;" it influences a man's character all through life, and renders him subject to commit acts under the influence of an *uncontrollable impulse*. It does not matter though no "fits" occur in adult years; the epilepsy is still there, it is only "*veiled*." Following out Dr. Howard's theory to its logical conclusion, if it can once be proved that a criminal has had "fits" in childhood, although no epileptic attacks have occurred subsequently in adult years, the epileptic neurosis must be assumed to be firmly and indelibly implanted in that man, and to influence his character and conduct all life long. If, moreover, he happens to be addicted to drink, so much the worse for his "*veiled epilepsy*," and so much the more liable will he be to *uncontrollable impulses*. Such a man may commit theft, highway robbery or murder with impunity; the more aggravated the crime, the more likely was it to have been prompted by his constant companion, his *fidus Achates*, his *veiled epilepsy*. Were the law to admit this extraordinary theory, and allow its practical application, criminals would soon become the scourges of society; they would commit the most heinous crimes with impunity, and evade punishment on the plea of "*veiled epilepsy*," which is, according to Dr. Howard, the offspring of drink and infantile convulsions.

6. We now come to the assumption, upon which Dr. Howard first based his theory of prisoner's insanity:

"No sane man would live in the constant breach of all social and natural laws, particularly in the breach of the first natural law of self-preservation."

In other words, open shameless crime, and the gratification of violent passions, reckless of consequences, are indicative of insanity. The danger of such a doctrine is self-evident.

We will next examine Dr. Howard's theories of the murder. He testifies:

1. That the deed was committed during an epileptic fit.

When asked by Mr. Davidson what grounds he had for this opinion, Dr. Howard replied (*vide Witness*):—

"The fact of the prisoner standing still for a minute after committing the deed was evidence that he was then in a state of epilepsy."

In other words, Dr. Howard affirms that the murder was the unpremeditated, unconscious, violent act of an epileptic maniac, committed during a paroxysm of epilepsy, for which he was not accountable. Dr. Howard accepts this view, for, in commenting upon Dr. Vallée's evidence, he says:

"Hayvern's act was momentary and violent, and there was no proof whatever of motive; on the contrary, the Crown proved that deceased and prisoner were good friends."

In order to uphold this theory, Dr. Howard must assume:

(1) *Absence of motive*, in spite of the strong evidence to the contrary. Prisoner said that he would never go to Kingston, and that he had stabbed Salter because Salter wanted to send him to Kingston, and that Salter would never call him insulting names again. He planned and executed a murder, which Judge Monk styled "one of the most skilfully performed tragedies on record." And yet Dr. Howard would have us believe that the deed was motiveless, and that the prisoner and his victim were at the time good friends.

(2) He must assume an *epileptic fit* just at the moment when prisoner happened to have a murderous weapon concealed upon his person, and his good friend Salter happened to be passing along the corridor. Just at that moment his epilepsy, hitherto "*veiled*," manifested itself, and in an epileptic paroxysm he rushed out, and without motive or premeditation stabbed his friend to the heart. Epileptic maniacs do not remember the acts they have committed during the fit, after its effects have passed away. But Hayvern knew immediately what he had done, and stated why he had done it; and when the warden told him that Salter was not badly hurt, Hayvern contradicted him, and said that he had stabbed Salter with a knife, and had done for Salter. In all reason, is this like the act of an *epileptic maniac* during a *paroxysm of epilepsy*?

2. When recalled by the Court, Dr. Howard advanced the theory that the deed was the result of an *uncontrollable impulse*; this is generally understood to be different from an *epileptic mani-*

acal impulse. An *uncontrollable* or *irresistible* impulse is usually considered to be an impulse which, by reason of mental disease, cannot be controlled or resisted by the will. The subject of uncontrollable impulse is conscious of it, and knows that the contemplated act is wrong; he may even struggle to resist it, but from deficient will-power his struggle is in vain, the impulse is to him irresistible. He is conscious of the impulse, conscious of committing the deed, remembers all about it afterwards, and is usually very sorry for what he has done. The theory of *uncontrollable impulse* is not substantiated by the facts of the case, and is in contradiction to other portions of Dr. Howard's evidence.

Dr. Howard's triple diagnosis of *imbecility*, *epileptic mania* and *uncontrollable impulse* necessitates the following interpretation of the facts of the case. Hayvern, the *imbecile*, rightly or wrongly believing himself to have been injured and insulted by his good friend Salter, determines to be revenged. He makes or procures a suitable weapon and secretes it upon his person; he obtains permission to dine in the hospital, which he knows Salter must pass on his way to chapel; he refuses his dinner, and paces backwards and forwards as if waiting for some one; when dinner is over, the convicts come upstairs and file past him; the moment that Salter appears, prisoner is seized with an *epileptic fit*, rushes out, and stabs his friend to the heart: he stands still for a moment till the fit passes off, and then walks downstairs to his own cell; he remembers nothing of what he has done, all subsequent knowledge of the deed is derived from conversation with others.

Or else, according to the theory of *uncontrollable impulse*, finding himself on the corridor when the convicts were passing, and happening to be possessed of a stabbing instrument, an *irresistible impulse* seizes him when Salter appears, and, in obedience to that impulse, he murders his friend. According to this supposition, he should have been able to remember all that happened; and as the deed was motiveless, unpremeditated and impulsive, he should have felt sorry for his act.

We leave our readers to judge whether Dr. Howard's position is tenable, and whether his diagnosis and theories are consistent with each other and the facts of the case.

In dealing with the question of impulsive insanity, care must always be taken to distinguish between an *irresistible impulse*, and an impulse which was

unresisted. All men have impulses; some resist them, others do not. The less a man controls his passions, the more uncontrollable they become; consequently, it is quite possible and even probable, that *habitually unresisted impulse* may cause such progressive enfeeblement of the will-power, that, eventually, impulse becomes *irresistible*. One great function of the law is to teach men to curb their passions; if uncontrolled impulse and unbridled passion are allowed to constitute a justification for crime, then one of Society's greatest safeguards is destroyed, and the law paralysed. It would have been a public misfortune had Dr. Howard's theories been accepted in this case by the Court and Jury, and Hayvern declared irresponsible for his acts on the ground of insanity; soon every daring crime would have been defended upon a similar plea. When the courts admit the doctrine that infantile convulsions and intemperance produce *epilepsy*, that epilepsy develops *uncontrollable impulse*, and that uncontrollable impulse absolves men from legal *responsibility* for their acts, society will become demoralized, the most aggravated crimes committed with impunity, and law and order openly defied.

THE CASE OF THE LATE PRESIDENT GARFIELD.

We publish elsewhere the report of the autopsy on the body of the late President Garfield, believing that it will be of interest to many of our readers who otherwise may not be able to obtain it. So much has been said in the public press of this now celebrated and historical case that every person has had an opportunity of following its progress by the bulletins which were daily issued. To none were these details more interesting than to the medical profession, whose opinions were constantly requested during the continuance of life as to the probable results. From time to time considerable adverse criticism has been evolved regarding the treatment, but it must be presumed from the diagnosis made during life that no other plan could have been adopted by the eminent surgeons who were associated in consultation; and although a grave error was committed in localizing the ball, still, even if its position had been accurately known, it does not appear that any other course could have been followed. The necessity of extracting the bullet was fully discussed, and the public mind has been pretty well

informed on this point. The common belief has been that in all cases this procedure is absolutely necessary or the results will be fatal. While there can be no doubt that whenever possible this should be done, especially when the position of the foreign body can be easily determined, yet, as a general rule, it is not considered wise to attempt explorations, especially when the probable course of the missile cannot be determined. The result in the case before us exemplifies this rule.

Gross in his great work on Surgery says: "No sensible surgeon ever thinks of searching for a ball in any of the great cavities of the body; such a procedure would be sure greatly to increase the dangers of the accident, and cannot therefore be too pointedly condemned." Most surgeons concur in this opinion. In view of these facts the first examination made by Dr. Bliss can hardly be considered proper, as he introduced a Nelaton's probe "to ascertain the course of the ball *and the organs involved in its passage*," and the thought occurs of the extent of information to be elicited by a hard probe as to the organs involved. The only information apparently obtained was that the probable course was downwards and forward and to the right side, and on this information another exploration was made with a long silver probe "suitably curved," which was passed downwards and forwards and also downward and backward "in several directions." The decision finally arrived at this examination was that the ball had entered the liver. Now it is well known that in psoas abscess pus finds its way very easily downwards between the muscles, and therefore an opening being already made into this cellular tissue it would be a very easy matter to push a probe downwards, and it may be questioned whether the probe suitably curved did not originate the canal which subsequently misled the consulting surgeons as being the supposed track of the bullet. The extreme difficulty of making an exploration has therefore been well shown, for even the eminent men associated with the premier attendant were so entirely at fault as to suppose that the ball had been deflected downwards into the pelvic cavity on the right side. The constant alteration of the internal organs due to respiratory and other movements rendered a search almost impossible, if not positively dangerous. No surgeon should allow himself to be influenced in his actions by friends or others under like circumstances, or by the fear of being deemed incompetent to

remove a ball, or by a desire to make a show of doing something. This is one of the lessons taught by this case, and another one is the absurdity of the experiments made with electricity. It might have been thought that the surgeons in charge would have objected to make so distinguished a patient the subject of uncertain and untried experiments. Nor did it reflect credit upon the art of Surgery in thus apparently showing to the public that we possess no other means of detecting the presence of a foreign substance in the body. The result, as is now known, was futile, and proved how dangerous such experiments might become; it detected the near presence of the ball within a few inches, when in reality the ball was many inches wide of this spot, and if this apparent localization had been relied on and an operation attempted, what terrible disgrace would have been incurred, as it took nearly two hours at the autopsy to find the ball. What might have been the results had the attempt been made during life?

If has been said, to maintain the dignity of the profession and art we practice, that all adverse criticism should be avoided, but with this we cannot agree. If everything was correct, then criticism can do no harm; if not, the interests of our profession would be ill served by silence. And first of all in the daily bulletins which were *officially* issued the public were misled as to the true condition which existed; statements were made which subsequent disclosures have not verified. It was asserted that septicæmia or rather pyæmia had set in and continued throughout, and the profession generally have accepted this as a fact. It may, however, be doubted whether pyæmia *per se* did exist, judging from the low range of the temperature as recorded. The morning temperature throughout seldom exceeded the normal state, only on the tenth and eleventh day did the evening temperature reach 102° , being generally below 101° , and towards the last but slightly above normal; on one occasion it suddenly went up to 104° , this was on July 23rd, and being due to pent up pus was quickly reduced on free incisions being made into the pus cavity. The report states as a fact that "It was a marked feature during this whole period of parotid suppuration that there was no associate systemic disturbance." Surgical authorities state that pyæmia is accompanied with extremely high temperature, severe rigors and copious sweating. Erichson says "that the temperature in pyæmia presents *remarkable and*

characteristic fluctuations, being uniformly high."

An additional doubt is thrown upon the case by the statement of Dr. Weiss of the University of New York, who examined the specimens and reported thereon. He says that from his investigations the President "never had pyæmia, and the course of the systemic symptoms do not warrant such an assumption." The official report of the autopsy also states that "there were no infarctions and abscesses in any part of the lung tissue." The abscess cavities which were found beneath the liver and on the kidney can be accounted for from purely local causes.

We did not from the first place implicit reliance on the official bulletins, emanating as they chiefly did from a physician whose past record is not altogether blameless. Many will remember the vile rubbish known as the Condurango Cancer Cure which this Dr. Bliss originated, and sold at a profit of above one hundred dollars a pound, and out of which he made a fortune. This is the Bliss who took possession of the President at the outset, and the impression remains that the eminent surgeons who were afterwards called in gave a silent consent to any statement made rather than create confusion in the public mind.

The official report makes no mention of pyæmia, and concludes with the remark that the most approved antiseptic dressings were used during the entire progress of the case—dressings which would have been perfectly useless if the blood was already in a septic condition. One word about the autopsy: this was not altogether conducted on the most approved plan. The injection of preservative fluids must have interfered with the condition of things, especially in the abdominal cavity, and the search for the ball was commenced from the wrong side, for "the missile was really found in the mass of intestines and annexa, after removal of the latter from the body." We have made the above remarks on the grounds that the report is fairly open for criticism, and that it teaches us once more the lesson, not to probe in these gunshot wounds of the cavities on account of the great difficulty in localizing the track, and in all cases to give a very guarded prognosis. In President Garfield's case there is one satisfaction, the treatment did not affect the final ending, which must have been under any circumstance inevitable.

THE OPIUM HABIT.

The October number of Appleton's *New York Medical Journal and Obstetrical Review* contains an interesting article by Dr. E. C. Mann on the nature and treatment of the opium habit. Dr. Mann believes that opium inebriation is rapidly becoming prevalent among all classes of society. He makes the remarkable statement that not more than one-fifth of the opium sold by retail druggists in the United States is dispensed in physicians' prescriptions. It is somewhat startling to consider for what purposes the remaining four-fifths are consumed. After sketching briefly the history of opium, Dr. Mann describes its physical and psychical effects, and explains how its victims are enslaved. The opium eater becomes eventually an opium sufferer: his misery and anguish are extreme; he is fully conscious of his wretched condition, but is powerless to emancipate himself from it. The will seems to be paralyzed. The author claims that the opium or morphine habit is a curable disease: success can be confidently promised if the sufferer honestly desires a cure, and is willing to place himself under the necessary control. Dr. Mann believes that in many cases the sudden deprivation of opium would produce dangerous shock; he accordingly reduces the dose of opium gradually, keeping the nervous system quiet by a combination of the bromides of sodium and ammonium. As the opium is decreased the bromides are increased, until in about ten days he is able to discontinue opium altogether. Hot baths, digitalis and nitre are employed to eliminate the bromine from the system. The reflex action of the cord, which has been purposely depressed by the bromides during the reductionary treatment, is then excited by strychnine. The central nervous system is stimulated by the daily use of general faradization. Phosphorus and cod liver oil are given as nerve tonics. From four to six weeks usually suffice to effect a cure. Dr. Mann believes that we have no specific able to counteract the effects of opium in the system, or eradicate the craving for it,—a thorough systematic course of treatment can alone secure success. He reports the complete cure of an army officer, who had been addicted to the use of opium for thirty-five years, and had reached latterly the enormous dose of 240 grains daily. Dr. Mann's article will well repay a careful perusal.

HOSPITAL NOTES.

Montreal General Hospital.—On the *Medical* side the wards have been for some time unusually full of typhoid fever. The prevailing type this season has been mild: out of 102 cases treated during the past three months only four proved fatal—two from perforation, one from asthenia, and one from severe lung complications. Three cases of severe intestinal hemorrhage occurred; all recovered. One of them passed seven large stools of pure blood, and sank at once into profound collapse; he was rallied with stimulants, gallic acid was administered internally, and an ice bag applied to the abdomen. No further hemorrhage occurred, and the patient made a good recovery. The antiseptic treatment of typhoid seems to be the favorite just now. Acid Carbolie, Tinct. Iodin. aa gtt. ij., every two hours, well diluted with water, are given for two or three weeks, while the fever runs high. The urine must be carefully watched during the treatment; smokiness indicates the presence of carbolie acid; the mixture must then be stopped or the dose of acid reduced. Quinine in large doses is seldom used now. The diet is milk. Relapses are frequent, and are generally attributed to indiscretions in diet or injudicious haste in leaving bed. *Diphtheria* has been somewhat prevalent; about 20 cases have been treated during the last quarter; three deaths occurred. Tracheotomy was performed once in an apparently favorable case; the patient did well for two days, but the disease extended downwards into the trachea, and death took place 52 hours after the operation.

On the *Surgical* side, there has been lately rather a dearth of operative work. Ovariectomy has been performed this season six times; five patients recovered, one died from exhaustion on the sixth day after operation.

A case of fracture of the spine about the 8th dorsal vertebra, from a fall down a hoist, has attracted some attention; it was chiefly remarkable for the comparative absence of paralytic symptoms and the rapidity of recovery. There was paralysis of the bladder and rectum, but no paraplegia; only slight pains were felt running down the arms and legs. The patient left the hospital in six weeks:

Hotel Dieu Hospital.—A good deal of surgery has been done at this hospital during the past

summer. One of the most interesting of the recent operations was the removal by Dr. Hingston of a firm, broad-based, fibrous nasopharyngeal polypus from a young man on the 14th ult. The polypus could be seen in front at the nasal aperture, and behind above the soft palate. The left ala was bulged out, and the hard palate pressed downwards. Dr. Hingston performed Professor Brun's operation in preference to that of Syme, so that less deformity might remain. An incision was made below the edge of the left ala and carried across the upper lip without wounding the mucous membrane of the mouth; a second one over the roof of the nose at the nasofrontal suture; and a third joining these two. With saw and bone scissors the hard parts were divided in the lines of incision through the soft parts: a vertical section of the septum was made, and with Langenbeck's Osteotome the whole nose was turned over till its tip rested against the right cheek. As this gave insufficient room, Dr. Hingston raised a portion of the periosteum of the left superior maxilla, and broke off the subadjacent bone. The tumor was then detached, and, by means of a string, drawn out through the mouth. The hemorrhage was very great, and the patient seemed to be in danger of suffocation. The operation was completed, with patient's head and chest hanging down over the table. A fortnight after the operation, the patient was exhibited at the Medico-Chirurgical Society. The nose was back in its place as straight and firm as in health, very little trace of the operation being visible. Dr. Hingston said that the subsequent section of the supra maxillary bone gave sufficient room, and that by sacrificing bone but not periosteum, neither deformity nor depression remained.

Notre Dame Hospital.—The practice of this hospital is largely surgical, owing to its central situation and its proximity to the wharves. During the month of October there have been two amputations of the breast for scirrhus, a resection of the femur for the cure of an ununited fracture of four months standing, an operation for a congenital occlusion of the vagina by a membranous septum, an operation for congenital torticollis, and a number of others of less note. A vascular tumor of the eyelid was successfully treated by electrolysis. A large number of fractures, both simple and compound, are under treatment; the silica bandage is employed in several cases of simple fracture of the leg. An

interesting case of traumatic peritonitis and hepatitis is doing well under opium alone, no external treatment being employed. A case of hard cancer of the uterus and vagina is under observation, and a gangrene of the glans penis from preputial inflammation has just been admitted. On the medical side there is a good deal of rheumatism. One of the most noticeable medical cases is one of capillary bronchitis in a boy of fifteen.

GLEANINGS FROM THE INTERNATIONAL MEDICAL CONGRESS.

HUXLEY'S THEORY OF DISEASE.—The body is a machine of the nature of an army, not that of a watch or of a hydraulic apparatus. Of this army, each cell is a soldier, an organ a brigade, the central nervous system head-quarters and field telegraph, the alimentary and circulatory system the commissariat. Losses are made good by recruits born in camp, and the life of the individual is a campaign, conducted successfully for a number of years, but with certain defeat in the long run. The efficacy of an army, at any given moment, depends on the health of the individual soldier, and on the perfection of the machinery by which he is led and brought into action at the proper time; and, therefore, if the analogy holds good, there can be only two kinds of diseases, the one dependent on abnormal states of the physiological units, the other on perturbation of their co-ordinating and alimentative machinery.

DR. KEITH ABANDONS THE SPRAY.—While using the spray, Dr. Keith had a succession of eighty successful ovariectomies, but in the next twenty-five cases he had five deaths, two from carbolic acid poisoning, two from acute nephritis, and one from septicæmia. On account of this mortality, and the very frequent high temperature the evening after the operation, he abandoned the spray altogether; since then he has had twenty-seven cases, with one death.

Lister does not accept irrigation as a substitute for the spray.

HALLUCINATIONS.—Fournié defines a hallucination as "An act of overvivid memory."

HUXLEY'S TORPEDO.—Huxley predicts that in the progress of Medicine it will become possible to introduce into the Economy a molecular mechanism which, like a very cunningly contrived

torpedo, shall find its way to some particular group of living elements and cause an explosion among them, leaving the rest untouched.

VIRCHOW ON VIVISECTION.—"So long as perfect liberty is left to every possessor of animals to kill his animals, be they wild or tame, at any time, and according to his own judgment, so long must it be permitted that, for scientific ends, and thus on purely internal grounds, experiments should be made on living animals. But the necessity of such experiments can naturally only be decided by the inquirer himself; as to the choice of place, time, the admission of strangers, he may be required to communicate with the inspector, but the carrying out of the experiment must remain in his own hands."

THE SCEPTIC.—Claude Bernard says that the Sceptic is he who does not believe in Science, and who believes in himself. He believes enough in himself to dare to deny science, and to affirm that it is not subject to fixed and determinate laws. The doubter is the true scientific man; he only doubts himself and his interpretation, but he believes in science; he admits even in the experimental sciences, a criterion, or an absolute scientific principle.

PERSONAL.

Dr. James Leslie Foley (C.M., M.D., Bishop's College, 1880) passed his examination for the Licentiatehip before the Royal College of Physicians, London, on the 22nd October. Dr. Foley is the first Bishop's College graduate who has taken out an old country qualification. He attended the practice of the London Hospital for over a year. Dr. Foley soon after his graduation was appointed Assistant Demonstrator of Anatomy in his Alma Mater. He will enter upon his duties after the Christmas holidays.

Dr. Bell, Medical Superintendent of the Montreal General Hospital, is ill with typhoid fever. Fortunately the attack does not promise to be a serious one, and there is every probability that in a short time Dr. Bell will be able to resume his duties.

Dr. P. Bender (M.D., McGill, 1865), Quebec, has come out as an author. Dawson Bros., of Montreal, in their November list of new books advertise one from his pen, entitled *Literary Sheaves*; or, *La Litterature au Canada Francais*, the

Drama, History, Romance, Poetry, &c., &c. Price, \$1.

Dr. H. J. Saunders, M.R.C.S., England, has been appointed Professor of Sanitary Science in the Royal College of Physicians and Surgeons, Kingston, Ont.

Dr. Canniff, of Toronto, has resigned from the staff of the Toronto General Hospital, and Dr. J. H. Burns has been elected to replace him.

Dr. William Sutherland has returned to Montreal after an absence of over six months in Europe.

Dr. Morton has removed from Bradford to Toronto.

Dr. Going has removed from London, Ontario, to Toronto.

COLLEGE OF PHYSICIANS AND SURGEONS, P.Q.

Mr. Lamirande, the prosecuting officer of the College, has since our last issue obtained the following judgments:

Gabriel Courchene, La Baie, Yamaska Co., has confessed judgment as an irregular practitioner and paid the fine and costs.

Joseph Quintal, Longueuil, has been fined \$25 and costs for practising without any license.

THE NEW MEDICAL TARIFF.

The new Medical tariff comes into operation on the 21st of this month. Members of the College of Physicians and Surgeons wishing to obtain copies of it can have them by applying personally or by letter to Dr. Belleau, Secretary at Quebec, or to Dr. Francis W. Campbell, Secretary at Montreal.

OPENING OF THE MONTREAL MEDICAL SCHOOLS.

McGill University opened its Medical Session on Monday, Oct. 3rd, with an introductory lecture by Dr. Buller. The class is we believe larger than usual.

Laval (Montreal Faculty) Medical Faculty opened on Oct. 1st. The attendance is very satisfactory to all those interested in its success.

The Victoria Medical Faculty (School of Medicine and Surgery, Montreal) opened on October

1st. The number of students attending this school is very large.

Bishop's College Faculty of Medicine opened October 4th, but had no introductory, going at once to work. The attendance is the largest this school has ever had. This large attendance has necessitated important alterations in the building. The dissecting room has been converted into a Practical Physiological Laboratory, and the Dissecting room removed to the top flat. The alterations are estimated to cost some five hundred dollars.

FELLOWS' COMPOUND SYRUP OF HYPOPHOSPHITES.

The medical profession is rightly a conservative one, and its members naturally look with strong suspicion upon any remedy which is introduced to the public through the public newspapers. In this way really excellent preparations have suffered. For a time they had a large sale, but their indiscriminate use soon brought failure, for there exists no universal panacea. Had their introduction been *to* and *through* the profession, then their use would have only been where indicated, and, if beneficial, success was certain. We have excellent examples of this in Trommer's Extract of Malt, Reed & Carnrick's Maltine and Lactopeptine, only introduced through the profession. These remarks apply with force to the preparation the name of which heads this article. Mr. Fellows introduced it to the public, and although the profession in St. John, N.B., Mr. Fellows' home, helped him by certificates, there can be no question that, as a whole, till lately the profession have given it the go-by. The preparation is, however, a good one, and its new proprietors, Perry Davis, Son & Lawrence, of Montreal, are attempting to retrieve the error of the original proprietor, and to depend upon the profession for its sale. In England they have adopted the plan, and the profession have taken to it so rapidly that the sales during the first six months were nearly, if not quite, double what was anticipated. Nearly all the British Medical Journals have noticed it most favorably. This success, we believe, the proprietor deserves; and now on its new departure we strongly commend this preparation to the profession for use in suitable cases, among which will be found strumous diseases generally, but especially phthisis, ushered in by preliminary laryngeal symptoms.

WYETH'S ELIXIR GUARANA.

Guarana is used with much benefit in cases of Sick and Nervous Headache, Neuralgia, Diarrhœa, Gastralgia, etc. The active principle is an analogous to Caffein, being found in Paullinia in five times the quantity that it exists in the best Coffee. The tonic influence allied with the stimulating effect renders it an exceedingly valuable medicine. The effect is almost immediate in all cases of headache, from whatever cause it may arise; but it is more especially beneficial in those produced by over excitement to the nervous system.

The usual mode of administration has been in powder; but the Elixir will be found not only more agreeable, but much more efficacious.

CADBURY BROS. COCOA.

We have received a sample packet of Cadbury's Essence of Cocoa, and, having tried it, have to express our entire satisfaction. The reputation of this firm in England is first-class, and the fact that they have opened a branch establishment in Montreal will strongly recommend them to the countenance and support of the Canadian people. We have reason to believe that all their preparations are of exceptional purity.

REVIEWS.

Indigestion, Biliousness and Gout in its Protean Aspects. Part I., Indigestion and Biliousness.

By J. MILNER FOTHERGILL, M.D., London.
New York: Wm. Wood & Co. Montreal: J. M. O'Loughlin, 1881.

Dr. Fothergill's books are always eminently practical and instructive; the present volume is particularly interesting. The style is easy and conversational, sometimes racy; the comparisons are apt and striking, and the reader's interest is sustained from first to last. Dr. Fothergill is a shrewd observer, and a firm believer in the efficacy of drugs; he submits pathological problems and therapeutic theories to the test of common-sense, and when he adopts a theory or recommends a plan of treatment, he can usually give a satisfactory reason for the faith that is in him. Culture and study, supplemented by large and varied metropolitan experience, enable him to take a broad and comprehensive view of his subject; only the salient practical points are placed before the

reader, all confusing details being carefully avoided. The author believes that, in the past, too much attention has been devoted to the pathological changes observed in the digestive tract after death, and maintains that indigestion should be studied from the physiological rather than the pathological standpoint. He accordingly enters fully into the consideration of the normal digestive process in the light of recent physiological investigations, dwelling at greatest length upon the functions of the liver, and the action of the bile and pancreatic juice. He then treats of indigestion and biliousness, discussing the causes, symptoms, and treatment, medicinal and dietetic. The various kinds of food are described, their proper selection and method of preparation. In the treatment of biliousness he advocates a good old-fashioned calomel purge in suitable cases, and gives reasons for his belief. He points out the general confusion which exists in the average medical mind as to the exhibition of malt, pepsine, and pancreatine preparations, and gives plain directions for the proper selection and administration of these artificial digestive agents. He quotes largely from Drs. Budd, Murchison, Foster, and Roberts, and also from his own "Practitioner's Hand-book of Treatment." The only faults in the book are its diffuseness and frequent repetitions. To the busy practitioner who wishes a clear and rational idea of the mechanism and treatment of digestive troubles, we heartily recommend this work as being well up to date, trustworthy and practical.

Chemical Analysis of the Urine. By EDGAR F. SMITH, Ph.D., and JOHN MARSHALL, M.D.
With illustrations: Philadelphia. Presley Blakiston. Montreal: Dawson Brothers, 1881.

This modest little book of 104 pages contains more practical information than many more pretentious volumes. The authors are practical instructors in Medical Chemistry, and their work gives evidence of a thorough acquaintance with the wants of medical men in this department. Casselmann's *Analyse des Harns* forms the basis of the work; but it has been largely supplemented by new methods of analysis, directions for the preparation of test solutions, and suggestions as to the details of laboratory work. The plates of Casselmann's book have been reproduced in this. Students engaged in laboratory work will find this manual concise and trustworthy.

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Original Communications.

THE USE OF ALCOHOL IN HEALTH.

BY

CASEY A. WOOD, C.M., M.D., Attending Physician to the Woman's Hospital, Professor of Chemistry and Medical Chemistry, University of Bishop's College.

Unless it be within the domain of strictly theological matters no question of the day has caused greater warmth of discussion, or has given rise to more diversified opinion, than the proposition to dispense with alcoholic mixtures as beverages in health. From the fanaticism of the "temperance" advocate at one extremity of the line of opinion we proceed by easy stages of varied belief to him who sings in consistent strains :

"Wine cheers the sad, revives the old, inspires
The young, makes weariness forget his toil
And fear her danger ; opens a new world
When this, the present, fails."

However, in this instance, as in most others of the kind, the truth is to be looked for most successfully not in the extremes but in the mean of opinion ; and as year after year the temperance question

receives full and free consideration on all hands this tendency towards stable equilibrium plainly manifests itself. Hence, chiefly, has arisen the moderate drinker. It is no longer the fashion in respectable society either to induce alcoholic narcosis or to abstain altogether, but to stop as soon as moderate stimulation is produced. This form of belief respecting the employment of alcoholic beverages obtains among a large, perhaps among the largest, class of those whose opinions we have a right to consider, and it behooves him who entertains a different belief to weigh carefully the evidence that has been brought forward in favor of moderate stimulation. As an example of lay opinion advocating this practice witness the following, copied from a recent number of the *New York Graphic* :

"Occasionally—but only occasionally—one reads in the reports of debates in ecclesiastical councils and synods words of real wisdom. There was an instance of this yesterday in the General Council of that new and struggling sect known as the Reformed Episcopal Church. One of the lay brethren of the council denounced in vigorous words the absurdity of calling 'total abstinence' 'temperance.' This is a distinction that should have been insisted upon long ago. Most people

are temperate in their habits of drinking as well as of eating—if they were not, the world would be made up of drunkards and gluttons—and to speak of men who are total abstainers from all that can intoxicate as ‘temperate’ is absurd. They are as intemperate in their abstinence as the drunkard is in his excess.”

Turning from positive utterances of this sort, so commonly indicative of non-scientific thought, to the calmer and abler advocacy of moderate drinking in its scientific aspect, the medical man will read with pleasure an address by Dr. Bayard, as given in the *Canadian Medical and Surgical Journal* for July, 1881. Here we have stated with great clearness, calmness and ability most of the arguments employed in favor of the use in health of a limited quantity of alcohol.

Regarding Dr. Bayard’s paper as a fair exposition of the grounds taken by moderate drinkers it is the purpose of this article to examine the premises of the arguments there educed, and to enquire whether the writer is warranted in drawing from them the conclusion set forth.

At the outset the whole question may be summed up as follows: *is its employment as a beverage one of the proper uses of alcohol?* If so, moderate drinking is certainly a sensible and proper practice; the editor of the *Graphic* has written both a cogent and a pungent little editorial, and Dr. Bayard’s remarks, in so far as they relate to the use of spirituous liquors, are strictly scientific and strictly logical. But if, on the other hand, it can be shown that alcohol is simply a powerful organic poison, its use as a drink in any shape or in any quantity is absolutely indefensible, the leading article just quoted loses its apparent cogency, and the well-written address will require revision for future readers. And Dr. Bayard recognizes this, for he lays peculiar emphasis upon the *use* of an article or process as contrasted with its *abuse*. The swallowing of a proper quantity and quality of food at proper intervals is one of the conditions of healthy existence, and these circumstances of amount and kind are regulated by fairly well defined laws which it behooves all those who would live aright to study and observe. The infraction of these rules, the ingestion of food in abnormal quantity or quality, *i.e.*, the *abuse* of food is a physical wrong, and it will surely be punished by dyspepsia and other disorders.

The keeping of one’s skin clean by bathing is another matter which ought to receive the attention

of every one, inasmuch as neglect to do so exposes him to dermic and epidermic disease; but (we have the high authority of Hebra for the statement) too frequent bathing, *i.e.*, the *abuse* of bathing, is also productive of skin troubles. Again, camphor is a valuable anodyne and antispasmodic, and its value in certain maladies is undoubted; but those people who in health contract the habit of eating it are guilty of its *abuse*, and they will be sure to suffer from its ill effects.

Our first enquiry, then, is to be directed to the value or place of alcohol as a drink in health, and let it be noticed just here that the moment the investigation commences it becomes subject, as a matter of course, to the laws of physiology, hygiene and chemistry principally.

Now, I do not think that Dr. Bayard would make any attempt to defend, on purely hygienic and physiological grounds, the use of alcohol as a beverage in any quantity, in any shape, or under any circumstances whatever. As a matter of fact it is extremely doubtful whether there can be produced a single instance where alcohol in any shape subserves a useful purpose in the healthy human system. If there be such an instance Dr. Bayard has certainly failed to furnish us with it in his paper; indeed, on the contrary, we are told (I quote his own words), “they should be taught that these ideas are fallacious, that the human system can alone be supported in health by food, that alcohol is not a food in the ordinary acceptation of the term; that no tissue of the body can be built up by it, as with other articles of diet; that a dangerous craving is created by the continued and unseasonable use of it; that while in moderate quantity it produces an exhilarating effect upon the mind, this exhilaration is certainly followed by a corresponding depression; that while it imparts a temporary strength to the muscular power that power cannot be sustained under its continued use; that the primary effect of it upon the circulation is to produce a glow of warmth upon the skin, which is of short duration and leaves the body colder; that it does not support the system under the enervating influence of extreme heat; that he who *will* indulge in the use of it should *never* do so in health upon an empty stomach, and that every organ of the body suffers more or less from the excessive use of it.” Again, “we will be asked whether alcoholic drinks are necessary ingredients for the sustenance, well-being and comfort of man? If used, at what times and under what circum-

stances should they be taken, and in what quantity? And, gentlemen, let me say that, upon the advice we give, depends in a great measure the good we can accomplish. With regard to the first question we may answer that he who eats well and sleeps well does not require alcoholic drinks; that the great majority of persons are better without them; that most of the alcohol consumed is worse than useless, the evils consequent on its abuse certainly preponderating over the benefits derived from them." These statements are undeniably correct, because alcohol is a fluid as foreign to the human economy as any that can be named. Even if it were proved that it does undergo in a limited degree an ill-defined process of digestion, even if it were shown to be partially burned up in the tissues of the body, its deleterious effects upon the liver, heart, and nervous system generally are too palpable to be overlooked. If, then, it is not right (in a physiological sense) to drink one drop of alcohol, is not the taking of that drop the *abuse*? If the conclusions of Dr. Carpenter be true (and I have yet to read a refutation of them), that "in the average man the habitual use of alcoholic liquors in moderate or even small quantities is not merely unnecessary for the maintenance of bodily and mental vigor, but is even unfavorable to the permanent enjoyment of health," and that "the effect of the habit is not merely to induce certain predispositions to disease by its own agency, but also to favor almost any of those which may already exist in a latent form," the inference surely is inevitable, that the abuse of claret, port and sherry begins with the first teaspoonful, and not with the fourth glass as Dr. Bayard would have it. This contention is so important, Dr. Bayard places so much value upon the definition of *use* and *abuse*, and refers to them so frequently, that I must emphasize and try to elucidate it. We cannot flirt with physical sins any more than we can with moral misdemeanors; if it be wrong to steal, the embezzlement of 50,000 dollars does not extenuate a petty theft of five cents. It does not justify it, even if it were shown that the greater stealing had caused much destitution and distress, while the five cents had not been missed.

If, to pursue the argument, alcohol has no *locus Standi* in the healthy human economy it is no excuse whatever for drinking a daily glass of beer or wine to say that a dozen glasses of gin per diem will probably sooner or later produce cirrhosis of the liver. Nor does the attempt to illustrate the

other aspect of the case make Dr. Bayard's idea less absurd. If it be illegal to explode fire crackers within the city limits, surely the illegality begins with the explosion of the first cracker, not after the firing of the third package! Judged by his own statements (and Dr. Bayard has certainly reflected the latest *dicta* of these sciences) both physiology and hygiene sternly forbid any kind of vinous or spirituous drinking in any condition of health.

To many minds conclusions arrived at in this way would be all sufficient. The use of alcohol in health (it would appear to them) is simply a scientific problem to be solved (if solvable at all) by the physical sciences, by chemistry, physiology and hygiene, within whose province it rightly lies; and when their combined fiat goes forth to prohibit its use in health the demonstration is complete. And for my own part I am free to confess that I consider it quite possible that a certain indifference to what may be styled the sentimental, conservative and expedient aspects of the temperance question must greatly hinder an appreciation of the effect which they may have on those who are not willing to abide by the decision of science. Laboring under this probable disadvantage I proceed to consider arguments drawn from these other classes.

As an example of the sentimental argument, Dr. Bayard, quite seriously I presume, says: "the remark is often made that the world would be better without alcoholic drinks than with them, that the evil counterbalances any good that may be derived from them. The answer to this is that every nation has its stimulant of some kind, that kind Providence has permitted the *use* of them, and that if they are abused evil consequences follow." And again: "But as I have said before alcoholic drinks have been given to man, and he will continue to use them." Now let it be noted that the answer to the allegation is not an attempt to show that the world would not be better without alcohol, or that more evil than good has *not* resulted from the use of alcoholic beverages, but merely two assertions are made: (1) that every nation employs stimulants of some kind; and (2) that kind Providence has permitted the *use* of them. With every desire to give these assertions all their possible force I am obliged to acknowledge that I fail to see how they have any bearing whatever on the question at issue. The fact that all nations are addicted to stimulants in some form clearly proves (on Dr. Bayard's own showing) that all nations are

badly afflicted with a mal-hygienic practice, which it behooves them to get rid of as soon as possible. In view of Dr. Bayard's previous admission as to the baneful effects of stimulants, his *answer* rather confirms than disproves the statement to which it is intended to serve as a reply. It seems evident that, if it be wrong to lie as well as wrong to drink, it is just as little justification for the former sin to say that men have been liars since the days of Adam as it justifies drinking to say that they have been drunkards since the time of Noah.

The second section of the answer, although frequently thrust forward as a reason why drinking habits should be tolerated, has, even less cogency than the first part. If it be stated that Providence really does approve of and sanction the employment of alcohol in health I should neither agree nor disagree with the statement, for I do not know anything about it; but if He does approve of its use there can be no shadow of doubt but that He sanctions (on Dr. Bayard's own showing) the employment of a very bad thing, and that the sooner He puts His veto on it the sooner will He deserve the adjective with which Dr. Bayard qualifies His name.

However, while we avoid, as out of place here, the theological question, and all it involves, as to whether the use of wine is advocated in the Bible,* something may be said relative to the statement that "alcoholic drinks have been given to man." Presuming that Dr. Bayard refers to the usual form in which this excuse for drinking is put, viz., that alcohol forms part of the materials necessary to man, is "one of God's creatures" to use the common expression, and consequently man is allowed its use—starting out with this premise, and admitting for the moment that, in consequence of this donation on the part of the Almighty, man has a right to *drink* it, an extension of this latter conclusion to other "gifts of God" will show its absurdity.

The kernels of the peach, the cherry laurel, etc.,

* Lees' "Text-Book" (page 116) has the following: "Among *certain* facts, these may be affirmed:—1. That the Bible nowhere *condemns abstinence* from strong drinks. 2. That the Bible nowhere associates *God's blessing* with the use of strong drinks. 3. That the Bible, in various ways, *commends* abstinence from strong drinks. 4. That the Bible, in various and emphatic methods, exhibits the *manifold evils* of strong drinks. 5. That the Bible is the first book that proclaimed abstinence to be the *cure* for drunkenness. 6. That the great principle of the Bible—*philanthropy*—enforces the practice of abstinence.

yield on distillation a liquid largely made up of hydrocyanic acid. It is very likely that the acid forms spontaneously in these and other vegetable products. Alcohol, on the other hand, is never found as a natural product in healthy vegetable tissues. The decomposition of saccharine solutions, as a result of a presence of the *torula cervisiae*, is the method of obtaining it that most nearly approaches a natural process. The gift argument probably applies, as a consequence, with greater force to the employment of prussic acid as a drink than to alcoholic mixtures! If some rare plant were discovered in the centre of the African continent capable of secreting wine in the same way the cocoa-nut supplies milk, or the "traveller's friend" furnishes water, I doubt not but that it would be served up as a strong confirmation of the assertion that a beneficent Creator approves of its use as a beverage, else why did He prepare it?

If, instead of containing petroleum, limestone pockets were found to be filled with gin, would not both moderate and immoderate drinkers be pleased to thank a far-seeing Providence for the wise provision thus made for His thirsty children of coming generations?

But though the products of the *laurus cerasus* and the coal measures are not alcoholic, they are yet "gifts of God" in the same sense that wine is; and the man who sees fit to use as a drink either bitter almond oil or unrefined coal oil may properly do so, for have they not been given to him?

It would be taking up too much room to consider in its entirety the question whether every nation is of necessity wedded to stimulants that will compare in their effects with alcohol, but this may be said with confidence—even if such were proven to be the case it is no argument in favor of the use of those stimulants—none whatever.

But even a superficial view of the assertion will show it to be altogether too sweeping. What stimulant, what national stimulant, do the Mohammedans make use of that will bear comparison with alcohol? What means the significant phrase employed by these people when one of their number has got drunk on the forbidden juice of the grape, "He has left Mohammed and gone to Jesus"?

To name almost every nation that has succumbed to the two most potent factors in Anglo-Saxon domination, viz., "hell and bayonets," is simply the bringing to mind millions who have

been cursed by the introduction of a more powerful stimulant than they possessed before. That fine race, the Maories of New Zealand, the Indians of North America, the inhabitants of the South Seas and the teeming multitudes of India have to thank their European conquerors for a far worse stimulant than they would ever have thought of using if left to themselves.

An eloquent convert to Anglican Christianity not long ago admitted that the Hindoos do not object to the introduction of the Christian religion on account of its dogmatic teachings, since, in their primitive state, the two religions bear a remarkable resemblance to one another, but a firm and logical stand is taken on some questions of ethical doctrine, and the most prominent of these is the objection they have to a God who permits His children to damn their (the Hindoos) souls with drink. Can it be doubted but that the people of China would long ago have gone back to their milder teas and coffee, if the British Government had not been accessory to the crime of poisoning them with opium?

The answer to another attempt to excuse moderate drinking meets with a sufficient answer in the challenge which at the outset is given to one of the premises in Dr. Bayard's syllogism:—"a certain amount of self-control is implanted in the mind of every individual; he knows that danger attends many of his daily acts; he commits the act and avoids the danger. So with the *use* of alcoholic drinks—the danger lies not in the use of them but in the improper use of them." The fallacy in this argument is by no means on the surface. Instead of being, as it first appears, composed of a single proposition, the statements that lead up to the conclusion are best expressed in and really form part of a double proposition. Stated seriatim these are as follows: *A* 1. Many (rightful) daily acts are attended with danger, but (2) man is endowed with self-control, therefore (3) man ought to be capable of doing the act and avoiding the danger.

B 1. Drinking alcohol in health is one of these (rightful) daily acts, and (2) man is endowed with self-control, therefore (3) man ought to drink alcohol in health, but avoid its dangers. Now, unless Dr. Bayard will say that he refers to other than *rightful* acts, I think he will acknowledge that before the conclusion in *B* can be admitted he must show that (Prop. *B* 1.) drinking alcohol in health is a *rightful* act; he has failed to do this (nay, more, on his own showing it is a *wrong* act)

consequently (*B* 3) the conclusion is unproven and unreliable. I quote further: "He should know that the highest attribute of a well-regulated mind is the power of self-control, that the act of self-government is *noble* when exercised in the face of temptation, nothing without it, and he who will not restrain an injurious appetite degrades himself to the level of the brute creation." True; but it may well be doubted whether there is anything ennobling in temptation *per se*; that all depends upon whether the individual exposed to it has sufficient will-power to resist. If he has, doubtless the endeavor to overcome an obstacle gives strength and confidence to the man, and it does raise his moral status, but what will be said of him who needlessly runs into the way of temptation, who exposes himself, body and soul, to danger when there is no justification whatever for the act? Surely, there is nothing noble or ennobling in action of that kind. The driver on an express engine runs many risks in the pursuit of his avocation, and we all admit the nobility of his calling, but can any excuse be found for the traveller in the Pullman who needlessly takes a ride on the cow-catcher?

The good which Dr. Bayard sees in the withstanding of temptation and the exercise of self-control can be had to a greater and nobler advantage in the practice of total abstinence. Let him who doubts attempt to abstain from wine, and at the same time mix in that society where the temptation that goes along with moderate drinking is assumed to be had, will his way be altogether a path of pleasantness? Will he find his burden light? Or will he be likely to learn to his cost that there is room and to spare for the exercise of all his powers of temper and self-control if he refuse to drink when, in consequence, all his companions and friends regard him in the light of a "spoiler of the feast" and when the symposiarch reminds him that in Rome it is the custom to emulate the Roman practice? I hold that the moderate drinker never resists a temptation that will compare with such a one. If the truth were known I believe it would be found that many men are moderate drinkers only because they lack the moral courage necessary to become total abstainers. If it be thought that we have so few "ennobling" temptations in this life that search must be instituted for a "temperance" one, let it be looked for in the life of the total abstainer and the searcher will not look in vain.

After advocating the so-called *use* of wine and spirits Dr. Bayard proceeds to define the conditions under which liquor should be sold. I quite agree with him that no amount of prohibition will prevent *in toto* the sale of liquor; that we are certain to have drunkards in spite of all coercive measures, and that, when prohibitionists declare that if prohibitory laws prevailed all over the globe the millenium would arrive, they are subjects of a fond delusion—all this I hold to be quite true, and yet *agitation for prohibitory liquor laws* is the necessary and logical outcome of the truth that alcohol drinking is an injurious nuisance.

Thirty years ago absolute and unconditional human slavery was largely believed in the United States to be a worthy, God-permitted institution, and suited to the temperament and mental condition of the poor African. Gradually, however, the idea gained ground that only he who treated his slaves in a proper manner had any *ordained* right to them; that the Almighty, though permitting slavery, intended the slave owner to be a sort of divine trustee, and believers in this idea inculcated kindness and humanity towards his trust. Holders of the latter opinion were among the most determined opponents of abolition the North had to deal with, and they constituted the great majority of Northern "copperheads," as they were called. Now the fact is, that slavery was wrong all along, and that it was wrong under the "trustee" notion and it was wrong under the absolute ownership notion, and only when the principles of equality and freedom were preached was any progress made towards abolition.

And so with alcohol drinking: continued progress beyond a certain point is only possible when the whole truth about it is proclaimed. I do not deny the utility of teaching moderation in drinking to the people, but why teach a half truth when the whole truth will better answer the purpose? Why preach moderate drinking when the inculcation of total abstinence as the true *principle* will not only do as much as the former, but will still leave the way open for progress towards the hoped-for time when man shall break his bonds of passion and stimulation, and rise superior to the need of checks of any sort.

The evident desire of advocates of moderate drinking is to prevent the evil effects that come from alcohol; teetotalers have the same end in view, but total abstinence, while condemning bestial drunkenness endeavors to do something

more; it would remove the *temptation* to excess.

I have no hope that even our children's children will see drinking habits done away with, though all moderate drinkers were to join the ranks of teetotalism—nor even if the education and general amelioration of the condition of the masses (the real effective combatants of vice) were to be brought about; but drunkenness will always reign while the way to it is paved by the "good intentions" of the so-called *use* of alcohol as a drink.

As in the case of all other half-truths and artificial barriers to vicious indulgence, much uncertainty and complexity surround the question of alcoholic excess when viewed from the standpoint of the moderate drinker. Hence the trouble about "voluntary" and "involuntary" drunkards, the difficulty of determining when a man has reached the hypothetical limit of alcoholism, and so on. The latter portion of Dr. Bayard's address shows this so plainly and is so instructive that I give it entire:

"Medical treatment has little effect upon the drunkard while he has the ability to indulge his appetite. But how the law should deal with him is a question of great difficulty. The liberty of the subject must be guarded, and the community justly claim protection from the violence of his acts. There are two classes of 'inebriates'—those who voluntarily get drunk, possessing the power to resist, and those who are so far lost that their voluntary power is destroyed. The first should be treated as misdemeanants, the last as maniacs. The voluntary drunkard should be severely punished, not by fine, which too often deprives his unfortunate family of food, but by imprisonment with hard labor. The involuntary drunkard, if I may so term him, should be *kept in restraint for a period sufficiently long to cure his malady*; how long that should be must depend upon the judgment of those in charge of him. While he may be classed as a lunatic, he is not, strictly speaking, insane. The man who drinks gets sober when the drink is eliminated. The insane man does not recover by such a process. But by continued abstinence the drunkard very often regains the power of self-control, which he cannot accomplish if left without restraint. Hence the imperative necessity for legislative action giving power to confine such persons. Did such power exist it would have a restraining influence, and give the unfortunate victim a chance of permanent reformation. Voluntary drunkenness is

easily defined, but the difficulty of the subject lies in the ability to define what constitutes involuntary drunkenness. There are many shades of drunkenness. At what point is the will so destroyed as to justify restraint?

This can only be learned by the history and surroundings of each individual case, and I hold that no individual should be incarcerated without a careful examination and report upon his case by, at least, three disinterested jurors, which report should be on file as a guard against improper restriction."

Also, "His daily experience teaches him that many, very many, become victims to the *abuse*. He thinks he possesses sufficient self-control to avoid the danger, and so he does up to a certain period; but let him continue to indulge at *improper times* and *improper quantities*, that self control is lost, and cannot be regained but by continued total abstinence. He cannot say that he will reduce his allowance; one glass will rekindle his appetite, when the fire will continue to burn until disease and death follow. If an individual is so weak-minded, and so much the creature of impulse and selfish desire, that, having experienced the pleasurable effects of intoxicating drinks, he will voluntarily surrender that power of will given him by Providence for his safety, and throw aside the reins of self government, and let passion run away with him, he is not to be pitied, can claim no respect, and is a fit subject for restrictive laws and punishment."

This from the moderate drinker's standpoint. Now if the law held that a man has no right to drink at all, there would be no difficulty about involuntary drunkenness. There would be no question of will. The misdemeanor should consist in the drinking *ab initio*, and the culprit should be held responsible for all his acts, because he knew that he had no right to drink at all. It seems a refinement of cruelty to say to a man, "You may proceed to a point in the use of wine which neither you nor I nor anybody else can determine with any accuracy—to a point which you will probably not recognize when you have reached it, but if you exceed that point you will be punished, and to make this method still more equitable I may inform you that if you transgress a sufficient number of times so as to prove, beyond all doubt, that you can no longer control yourself, we shall not punish you, but will simply

incarcerate you until you have regained your first wisdom."

This strained position is rendered still more invalid in the second quotation. Here the writer tacitly admits what I firmly believe to be true, viz., that voluntary drunkenness is exceedingly rare and exceptional. No man starts out with the intention of becoming a sot. There are easier and straighter paths to the banks of Lethe than those which run through Falernian vineyards, and the uninitiated will take advantage of them.

And yet the advocate of moderate drinking would punish the unintentional drunkard, but pass by other tipplers who are kept from excess, not by any exercise of self-denial but by the mere *accidental* possession of will-power, for which they deserve no credit whatever. That is to say, to those unfortunates who have been unwittingly led astray by the false teachings involved in so-called moderation "moderate" ethics would mete out punishment.

Dr. Bayard admits, too, that a goodly number of moderate drinkers must, of necessity, be kept on the tenter-hooks of eternal watchfulness. Hence the minute directions about the time of administration, the quantity of liquor to be drunk, the circumstances under which it should be taken, and the extreme care that should be exercised in connection with moderate drinking, etc.

All this is avoided in the case of the total abstainer. It is not needed that he should be directed in this way, since he knows that *he has no right to use alcohol as a beverage in any quantity or at any time*.

I have reserved until the last the consideration of the argument from expediency, because one aspect of it certainly does have an important influence on governmental regulation of the sale and manufacture of spirituous beverages. With the following words of Dr. Bayard I agree in every respect: "The next question for consideration is, what has legislation done to abate intemperance, and what can it accomplish? Laws upon the statute book are useless unless carried out, and to accomplish this object the laws require to have the approval of a large majority of the community who must feel that he who evades them degrades himself. Now it is idle to expect that laws prohibiting the *use* of alcoholic beverages will be carried out, while the *importation, manufacture and possession of them is allowed*, unless the "masses" are brought to the belief that the social

use of them is degrading and injurious to health. This belief does not exist, owing to the fact that a very large majority of those who purchase and consume liquor use it in moderation, are never intoxicated, and do not feel that they are injured by it." Exactly; and one might add to this the sad fact that even a belief that alcohol is injurious to health would be inoperative to prevent drunkenness among the masses. It is always better to recognize the truth, and I think it is well stated by Spencer (Study of Sociology, p. 359) when he affirms that: "It is never the knowledge which is the moving agent in conduct; but it is always the feeling which goes along with that knowledge, or is excited by it. Though the drunkard knows that after to-day's debauch will come to-morrow's headache, yet he is not deterred by the consciousness of this truth, unless the penalty is distinctly represented, unless there rises in his consciousness a vivid idea of the misery to be borne, unless there is excited in him an adequate amount of feeling antagonistic to his desire for drink. Similarly with improvidence in general. If coming evils are imagined with clearness and the threatened sufferings ideally felt, there is a due check on the tendency to take immediate gratifications without stint; but in the absence of that consciousness of future ills which is constituted by the ideas of pain, distinct or vague, the passing desire is not opposed effectually. The truth that recklessness brings distress, fully acknowledged though it may be, remains inoperative. The mere cognition does not affect conduct—conduct is affected only when the cognition passes out of that intellectual form in which the idea of distress is little more than verbal, into a form in which this term of the proposition is developed into a vivid imagination of distress—a mass of painful feeling." Consequently I would welcome any means, direct or indirect, whereby this sad habit could be lessened, whether it be brought about on "moderate" or "immoderate" principles. Whether prohibitory laws are always beneficial in the long run is a question as yet unsettled, although it would appear as if they are doing little for the cause of temperance in some parts of the world. Probably much depends upon the feeling in the community that adopts them. We should be willing, however, to have them, and indeed all measures of the sort, judged by their fruits, and if it be found that any form or modification of the license system accomplishes

most good in a given locality, by all means let it be adhered to. And if, on the other hand, total prohibitory laws give better results in another locality they should be adopted just as soon as possible. Only the trying of the experiment, each town, city, or community for itself, will decide the matter in a particular case. Local option is the application of the principle in medicine that we can lay down no hard and fast rules for the treatment of a disease, each case must be studied for itself and treated on its own merits.

But this, let it never be forgotten, is quite different from the rule that should guide individual action.

It may be *expedient* to permit the sale of liquor by license, but no man can shield himself behind a general law, and expect thereby to justify his personal use of alcohol. Because the law recognizes the fact that men in certain places will drink and do themselves harm in spite of all precautions, it does not follow as a matter of *right* that the individual may drink. That is a question still of personal conscience. Legislative action has already proved this when it allows him the right to agitate for repeal of or amendment to all legal enactments. Legislative measures under representative government is simply the reflection of the will or belief of the majority of the people, and they may be right, or they may be wrong. In either case the minority must submit to the majority, as this is, so far at least, the only way in which representative government can be carried on. After entering its protest the minority must be ruled by the larger mass of opinion. Regarding the state of society that cleaves to mal-hygienic practices as undeveloped, and holding the prevalence of sanitary conditions to be fairly good evidence of the reign of a higher intelligence, the reformer must see how useless it would be to enforce prohibitory measures (the legitimate outcome of teetotal belief) on a community unprepared for them. But a recognition of this truth does not do away with a man's individual responsibility. If he advises the introduction of laws permitting moderate drinking, he does so only because he knows the community is unprepared for something better. If the mass of the people around him are so lacking in self-control, so ignorant of the laws of healthy existence, and indeed so careless of the consequences that follow their rupture, as to be better controlled by the practice of moderate drinking, it does not absolve him, with his fuller knowledge, from pursuing the course which he has learned to be right. But the cases

are exceptional where the inculcation of total abstinence will produce less effect than the teaching of moderate drinking. In fact, I think it may safely be stated that for all practical purposes we need not consider them at all. If the average citizen will be influenced by an exhortation to drink moderately, he can be brought to consider the advisability of giving up the habit *in toto*.

It must follow, I think, from what I have shown that even if Dr. Bayard's arguments from necessity and expediency were ever so admissible, his concluding appeal is not made less inconsistent thereby, for when he says, "I must close my paper with an appeal to all who hear me, and may say to my professional brethren who do not hear me, in favor of *temperance in the use of alcoholic drinks*," he enters the field of individual conduct, and I think it must be admitted that no man can logically defend his own indulgence in alcoholic liquors in health. Temperance homes and asylums, the license system, legislation dealing with the manufacture and the sale of wines and liquors—all these may find some sort of plausible explanation in the *argumentum ad necessitatem*, and the total abstainer may discuss or even assist in carrying out these projects, but the healthy *individual* is left with no ghost of an excuse for drinking the least quantity of wine, beer or spirits.

But if moderate drinkers and drinkers that are not moderate consider that their own standard of right is a safe one to follow, and if in following it they do not feel that their conscience prohibits indulgence in alcoholic liquids, there still remains one other consideration, the substance of which the philosopher Confucius refers to. Put in a slightly different form from that expressed in the Chinese Book, many persons will recognize the hand of another apostle of equal piety and equal learning: "*Videte autem ne forte haec licentia vestra offendiculum fiat infirmis*." Epistola Prima ad Corinthios cap. viii, 9, therefore: "*Bonum est non manducare carnem, et non bibere vinum, neque in quo frater tuus offenditur, aut scandalizatur aut infirmatur*." Epistola ad Romanos, cap. xiv, 21.

And upon these wise and calm words of St. Paul I am willing to let the settlement of the temperance question rest, for when the heat of discussion concerning the individual right to drink wine and the communal right to sell it has been dissipated, and there remain only these ethical propositions to consider, I believe the moderate drinker

will require merely his own personal experience to shew him how untenable is his position.

Montreal, October 9th, 1881.

THE PLEA OF INSANITY IN THE CASE REGINA VS. HAYVERN.

BY

A. VALLEE, M.D., Visiting Physician to the Beauport Lunatic Asylum.

Doctor Howard, in the November number of the CANADA MEDICAL RECORD, comments upon and analyzes the evidence given by the medical men heard in the case of the Queen *vs.* Hayvern. It is not my intention to enter into a discussion with Dr. Howard: I merely desire to explain the evidence I gave in the case in question. No one will undertake to dispute the fact that whosoever commits a criminal act is considered sane of mind until the contrary has been established. In Hayvern's case Dr. Howard was brought forward by the defence to effect this proof of insanity. Thoroughly cognizant of the extensive experience of the Visiting Physician to the Longue-Pointe Lunatic Asylum, I naturally expected proof both serious and unassailable. Imagine, then, my astonishment while listening to the exposition of his diagnosis and his theories on the impulsion of which the unfortunate Hayvern was supposed to be the victim. Never, I confess freely, have I heard so short-sighted a diagnosis of insanity.

According to Dr. Howard, the three principal symptoms distinguishing the prisoner were sleeplessness, partial paralysis of the sensitive nerves and abatement of the temperature. In as far as the two first are concerned, their importance depends upon circumstances, but they are decidedly far from being infallible signs of insanity, as Dr. Howard contends: one must have come into contact with no other patients than lunatics to entertain such an opinion. With regard to the last abatement of temperature, it is frequently met with in mental aberration; but, before admitting a temperature of 92.05 in a person peacefully pacing his cell to and fro, it is but right for me to exact a more rigorous examination than that effected by Dr. Howard. How comes it that after discovering so abnormal a temperature he was perfectly satisfied with a single application of the thermometer in the arm-pit, without thinking

of repeating the experiment by changing the thermometer and placing it in a closed cavity? No matter how marked the depression of temperature, of itself it does not constitute a proof of insanity: but, at all events, this abatement should be clearly ascertained. Dr. Howard arrives at the conclusion that the prisoner struck the blow while under a fit of epileptic mania; and, consequently, could not be held responsible for his act. Admitting this hypothesis, the fit must have been epileptic dizziness or veiled epilepsy,—now the unsettled state of the mind, the obtuseness of its ideas, the confusion of souvenirs, are the essential characteristics of such attack; nothing analogous can be detected in Hayvern: on the contrary, every thing indicates most clearly that his crime was designed beforehand. He chose his victim, fixed his hour and, after striking down Salter, explained his reasons for so doing: “You’ll never call me C...S... again.”

That same evening he recollected right well what he did and, in presence of his keeper, stated he was actuated by a thirst for revenge. Whether we consider the circumstances preceding, attending, or following his act, we find nothing which can lead us to suspect insanity. Finally, in order to invoke the plea of insanity as a means of defence, one must be armed with a plausible reason; and, notwithstanding my good-will, I see none in the case engaging our attention.

I never declared, as Dr. Howard claims I did, that the knowing right from wrong is a proof of sanity; I simply said, in answer to a direct question put me by the Crown Prosecutor that, at the moment he committed the act, the prisoner could distinguish right from wrong. Had it been my desire, I might have added, in order to complete my idea, that prisoner was in the full enjoyment of his free will, and could have chosen between right and wrong. Right well do I know, just as well as Dr. Howard, that a lunatic can distinguish between right and wrong, and this I implicitly admitted in acknowledging the possibility of irresistible impulsion. The fact is, under irresistible impulsion the patient does not invariably lose the notion of what is just and what is not, of what is right and what is wrong; he is irresponsible, however, because a lesion of the intellect deprives him of his free will, and he is domineered by a power superior to his will.

What I contend is that nothing similar existed

in the prisoner Hayvern, at least if we are to judge from the evidence adduced in Court.

To sum up all: I conclude that the defence, desirous of entering a plea of insanity, should have had that plea clearly made out by their own expert. Now Dr. Howard’s attempt was a complete failure; that the prisoner was epileptic was not ascertained, and, even so, the simple fact of being epileptic does not exclude the responsibility. Moreover, if we admit the evidence produced in Court, we find in the prisoner’s conduct a coherency which, at first, would seem quite incompatible with the slightest suspicion of insanity.

Great, indeed, is the responsibility weighing upon the doctor’s shoulders where there is a question of life and death; but I reasoned: “if a doctor is bound to do justice to the accused, he is also in conscience obliged to protect and uphold the interests of society.” Under pain of sapping the very basis of society, there exists a distinction which the medical jurist must not lose sight of: he must not confound the corruption of the will, which is the work of perversion, with the loss of free will, which supposes a complete or partial lesion of the intellect. In the first case, the victim gives way to the depraved impulses of passion: in the second, he is an irresponsible being, having no longer the means to resist the impulses controlling him.

THE QUEEN *VERSUS* HUGH HAYVERN FOR THE MURDER OF JOHN SALTER.

SECOND PAPER.

Written for THE CANADA MEDICAL RECORD

BY

Dr. HENRY HOWARD, Government Visiting Physician
Longue Point Lunatic Asylum.

SIR,—I am sorry you have written in anger. It was disingenuous of you to pretend the cause of your anger was that part of my communication which was a mere abstract statement, having no more reference to you than to myself, or any other person. No one except a man wishing for cause to write offensively would be thus guilty. I am not surprised, I am past the age of being surprised, but I am sorry that a journal that has heretofore been such a *friendly* and independent journal should have made such an uncalled-for attack upon me as to preclude the possibility of my ever again writing a line for it after this communication. You will say, no loss.

In your Number for October, speaking of my evidence you say: "The following points were emphasized:—great pallor of surface, profuse perspiration, low temperature, rapid visible pulse, rapid respiration, *abdominal* aneurism, sluggish pupil, and diminished cutaneous sensibility.

Perfectly correct, with one exception. I did not say abdominal aneurism. I beg to refer you to the GAZETTE's report for what I did say: "These are the sounds that Dr. Pomerville so ably described to you, and are frequently found in persons of an *epileptic* neurosis, but they *may be* early symptoms of aneurism."

You see I was not trying to prove aneurism but an epileptic neurosis.

"In order to test his views upon irresistible impulse, the following question was propounded to him by the Crown Prosecutor: Could a man *prompted by revenge or hatred premeditate a deed of violence, prepare and conceal a weapon, lie in wait for his victim and perpetrate a murder,*—and could he, although at the time able to distinguish between right and wrong, be held irresponsible for his crime on the ground of an *irresistible impulse*? Dr. Howard asserted that *irresistible impulse* in such a case was quite possible, and would confer irresponsibility."

Never was there a hypothetical case propounded to me in the manner you have put it. The question was: "If such a man plunged a knife or dagger into the heart of a man he *never knew, never saw, nor never heard of*, and against whom it was impossible for him to have malice?" The Court repeated the question after the Crown prosecutor, whereupon I turned to His Honor and asked if I were to understand that the murderer never knew, never saw or even heard of his victim, and was ignorant at the time of who his victim was, and His Honor answered in the affirmative. Then I replied that I certainly should consider a man that would do such an act, seeing that it was impossible there could be malice prepense, must certainly be *mad*.

At that time I never said a word of uncontrolled impulse, nor was I permitted to further explain. If I was I should have said that the man was controlled by an *insane desire* to kill some one, and killed the first man he met, just as a mad dog bites the first person that comes in his way.

Again you say, "Dr. Howard denied the existence of monomania or partial insanity, and claimed that if a man is really insane upon any one point, he must be insane in all, his mind must be a *total wreck*." I

never said that his mind must be a total wreck. I stated distinctly that there are different degrees of insanity, and that what was called monomania was only a *phase* of mania, not a *form* of mania. I do maintain that an insane person's whole mind is insane, but as, for example, in typhoid fever one case may differ from another in excess or severity,—it may be mild or severe. No man would make use of such an absurd expression as that a man was partially typhoid fever; he might say that one case was worse than another, but in all cases, whether mild or severe, it would be a case of typhoid fever. So with insanity, an insane man is wholly insane, but two cases will differ very much in degree, as in the cases of typhoid fever. Again take three glasses of water, put into one a teaspoonful of prussic acid, into the second two teaspoonfuls of prussic acid, into the third three teaspoonfuls of the acid, the water in the tumblers will be *all* poisoned, but not to the same degree. Thus it is that I speak of a person being wholly insane. But the mind to be a "*total wreck*" there must be dementia.

Speaking of me again you say, "He maintained that although there are different degrees of insanity, it is impossible to conceive of an insane man being either *morally* or *legally* responsible for his acts."

I said legally, and maintain it. I did not say *morally* for I know better, as every one does who has ever had the charge of an insane asylum. But to be morally responsible does not constitute legal responsibility. I am quite aware that I differ with many alienists in this respect. But I cannot conceive the justice of society holding an insane man legally responsible for his acts, no matter how mild may be the case.

THERMOMETRIC EXAMINATION OF HUGH HAYVERN.

DR. HENRY HOWARD'S EVIDENCE.

"First examination his temperature was 93 4-5°, second examination 92 2-5° Fahr."

DR. VALLEE'S EVIDENCE.

"A man whose temperature is at 95 2-5 must be suffering greatly."

DR. GARDNER'S EVIDENCE.

"Witness in all his experience and reading never saw a case where the temperature was so low except in cases *where death was impending*."

DR. JAMES CAMERON'S EVIDENCE.

"Agreed with Dr. Gardner on the subject of temperature. *The lowest degree of temperature on record is 92 1-5° Fahr.*"

Here Mr. Curran, Q.C., handed Dr. Cameron vol. xxiii. of the Journal of Mental Science, No. for October, 1877, opened at page 401, where was the following: "*Low temperature in the insane.* Zenker has studied nine cases of lunatics, where the bodily heat was found easily to sink; it fell in three cases as low as 32.2°, and in one case as low as 30.6°. In some of these instances there was maniacal excitement, but the sinking of the temperature was always accompanied by a tendency to lethargy."

This thermometer marking not been Fahr., Dr. Cameron undertook to explain to the Court that this temperature, 32.2° and 30.6°, was a higher temperature than that given by Dr. Howard, viz., 93 4-5° and 92 2-5° Fahr., whereupon the learned Counsel for the Crown, Mr. Davidson, Q.C., assuming that the Professors of Medical Jurisprudence in the Universities of McGill and Bishop's were better authorities than Dr. Howard with his twenty years practical experience in the treatment of the insane, thus addressed the jury: "In the very first point, viz., *temperature*, the evidence of Dr. Howard is directly in opposition to the *established principles* of medical science, and the medical gentlemen examined for the Crown have *conclusively* shown that the degree of temperature found in the prisoner by Dr. Howard would be that of a man near the *point of death*, and that was not the case with the prisoner."

Now what are the facts? Dr. Cameron ignorantly, for he would not do it wilfully, led the learned Counsel astray, and he in his turn led the Court and jury astray. Here is the true reading of the thermometer:

Dr. Zenker, 32.2° equivalent 90 2-5° Fahr.

" 30.6° " 87 3-5° Fahr.

So while Dr. Cameron held in his hand *positive proof* of a lower temperature than the temperature I quoted Hayvern's to be, he declared it a higher temperature, deceiving the Court, Crown Counsel and jury to the great prejudice of the prisoner at the bar. Not only this, but Dr. Cameron positively declared that "*the lowest degree of temperature on record* was 92 1-5° Fahr., yet here has been, on record, since October, 1877, a temperature of 87 3-5° Fahr. that he was ignorant of, notwithstanding his positive assertion, on oath, for this was an assertion, not an opinion.

But look at the fearful results of this assumed knowledge. The Counsel for the Crown accepts these statements and convinces the jury that they

broke down my testimony "*on the very first point, viz., temperature*," consequently the jury considered that the whole of my testimony was broken down. Result: verdict against the prisoner.

Had Drs. Vallée, Gardner and Cameron not have led the Court and Crown Counsel astray, they in their turn *could not* have addressed the jury as they did, whatever other plea they might have set up, and the result, for the unfortunate prisoner, *might* have been very different. It *might* have been a verdict of manslaughter, not murder. I say this from the fact that the whole effort of the learned Counsel for the Crown was to convince the jury that my evidence had been broken down, and *consequently* the plea of insanity had not been sustained and insanity established.

FURTHER PROOFS THAT I WAS CORRECT IN MY THERMOMETRIC EXAMINATION OF HAYVERN.

On the 25th of October, 1881, I received a postal card from my old friend, the father of Canadian Alienists. The following is a copy: "Have you read Charcot's lectures on diseases of old age, the June No. of Wm. Wood & Co., Library of Standard Medical Authors? If not, get it and turn to bottom of page 185 for low temperature of some lunatics."

I got the book, and here is what I found: "It is undoubtedly on account of inanition that a more or less enduring fall in temperature has been quite frequently observed in subacute and chronic mania, with symptoms of depression, chiefly melancholia, attended with stupor. But the interpretation we offer cannot be applied to all cases of this kind. Quite recently, indeed, Dr. Lowenhardt, of Lachenberg, has reported two cases of insanity, where the *rectal* temperature reached the almost incredible points of 31°, 32° and 32.5° (87.8°, 89.6° and 90.5° Fahr.), persisting during several weeks, while nutrition did not appear to be affected in any noteworthy degree. One of these patients was excitable, the other *erotic*, and both took sufficient nourishment."

Now if, as according to Dr. Vallée, "a man whose temperature is at 95 2/3° must be suffering greatly, what must a man be suffering at 87.8° and 89.6°? But these men were not suffering at all; on the contrary, nutrition did not appear to be affected in any noteworthy degree, and one was excitable and the other *erotic*. But according to Professors Gardner and Cameron these men should have *died*, but they were so obstinate they

would not, but persisted in this state for several weeks. I rather think that the verdict of mental scientists will be, that Dr. Howard *was in accord* with the *established principles of Medical Science*, if there are established principles, and that if Drs. Vallée, Gardner and Cameron never heard or read of so low a temperature as 92 2-5° Fahr. except where death was impending, it does not follow that other men of larger experience did not find such temperature, even central temperature, and mine was external axillary temperature.

The mistakes that these gentlemen have fallen into are: 1st, in believing that the physical symptoms to be met with in sane persons are applicable to insane persons; 2nd, conceiving that they could know anything of insanity except by experience. They might from books talk and write learnedly of insanity, but that is all. To learn the workings of the insane mind is impossible without long practical experience, and even with such experience not know the one half of what yet remains to be known.

I strongly maintain, in opposition to my confrères who testified for the Crown, that as far as clinical symptoms are of value in assisting towards diagnosing any disease, *insomnia*, cutaneous *anæsthesia* and *low temperature* are important symptoms towards diagnosing a case of insanity, although low temperature is a well-known symptom in cholera, and according to Charcot there is low temperature in persons of old age having certain diseases of the heart, such as pericarditis, senile gangrene, marasmus, and various forms of cancer, but when any of these diseases exist, there are other symptoms to guide the medical man in addition to alidity.

Much stress has been laid on my not recognising different forms of insanity, according to symptomological classification. I fully recognise different *degrees* of insanity, and insanity presenting different psychological aspects, but I deny such a thing as *partial insanity*; moreover, valuable as symptoms must always be, I consider a more useful and practical classification of insanity would be a classification from cause, and at this I have been timing for years.

RECAPITULATION OF TEMPERATURE.

	NORMAL	98 2-5° Fahr.
Hayvern's	93 4-5°	"
"	92 2-5°	"
Dr. Zenker, 32.2° equivalent	90 3-5°	"
"	30.6°	"
"	87 3-5°	"

*Dr. Cameron said higher than Hayvern's, and that lowest on record was 92 1-5°.

Dr. Lowenhardt	31.32°	"	87.8°	"
"	32.5°	"	89.6°	"

Hayvern's temperature was low enough certainly, but here are temperatures in the insane much lower. The reader must understand that a decimal of a degree is of the greatest importance in all cases. I could not, nor would not, believe otherwise but that all my respected confrères gave, in this case, their evidence to the best of their knowledge and belief, but I fear they did not sufficiently consider their great responsibility when they each and all collectively left the impression on the Court and jury, that the knowledge of *right* from *wrong* was a proof of *sanity*, and further that no man with a temperature of 92 2-5° Fahr. "*could be otherwise than in a dying state, which Hayvern was not.*"

These were the strong points made use of by the CROWN PROSECUTOR and the COURT to convince the jury that Hayvern was, in the broadest sense of the term, guilty of murder, and for this, *as I have shown*, false impression my confrères on the side of the Crown are responsible; not wilfully certainly, yet responsible. At the moment, it was but natural that these young men should have felt some pride that the jury accepted their evidence as a proof that I had failed to establish that the crime was committed under an *insane uncontrollable impulse*.

They will now, I hope, see how far they were justified in thus unwittingly leading the Crown Prosecutor, the Court and jury astray upon what the Crown Prosecutor stated "on the very first point, viz., *temperature*, the evidence of Dr. Howard is directly in opposition to the *established principles of medical science.*"

I expect the learned Counsel will now change his opinion. Facts are stubborn things, and I have given *facts* which prove that I was perfectly in accord with the *established principles of medical science*.

In concluding this paper I would remark that, notwithstanding the evidence of JEAN BRIERE, it appears to me the greatest possible absurdity, except on the assumption of Hayvern's insanity, that he, Hayvern, should suspect Salter of trying to secure his removal to Kingston. What power Salter the convict could have to send Hayvern the convict to Kingston is to me inexplicable. One word with regard to the knife that Hayvern killed Salter with: You have laid great stress upon the fact of his having the knife, I am not surprised

that you should, for it was the only attempt on the part of the Crown to prove malice; indeed, his Honor in charging the jury said: "It had been proved beyond doubt that there was premeditation and malice aforethought. *Hayvern prepared the knife, waited for his victim and executed his crime most effectually. The deed was one of the most skillfully performed tragedies on record. The preparation of the instrument that was to pierce the heart was also artistically effected.*"

I now ask a question which I have good reason to believe, if answered, must be answered in the affirmative:

Is it not a well-known fact to every officer of the Penitentiary of St. Vincent de Paul that the very day before Salter was killed the chief officer of that Institution took from off the persons of the convicts and from out of their cells nearly one hundred of such knives, with files, razors and other similar instruments, and did not the ex-Warden of the Penitentiary permit the convicts to have their knives and files for the purpose of making ornaments out of bones and wood?

I say this question if answered must be answered in the affirmative, and that will destroy the theory of "premeditation and malice aforethought."

Correspondence

To the Editor of THE CANADA MEDICAL RECORD.

DEAR SIR,—Knowing the interest you take in physical education, I address a few remarks to you on the subject, hoping that, if you kindly give them insertion in your widely read journal, they may be the means of awakening an interest in the minds of many who have, perhaps, never given the matter a thought, or, if they have, never appreciated fully its very great importance.

I have for several years devoted my attention to physical education, and, as a result of my long experience, am more and more convinced that, without exercise, health is impossible, and that to attain the highest, and really satisfactory results, it must be of a systematic character. I have had thousands of pupils under my care, and know by practical experience what wonders can be accomplished: it therefore appears most extraordinary to me that so few, comparatively, take any interest in what so nearly concerns their welfare and happiness; and still fewer are willing to test for themselves

the effect of devoting a certain portion of time to practicing the health and strength giving exercises of the gymnasium.

Years ago young men joined my classes merely with a view of learning a few showy feats, and after having satisfied their ambition, and duly enjoyed for a brief period the plaudits called forth by their performances, disappeared from the gymnasium; but now they come for the purpose of developing their bodily powers, and watch with keen interest the progress they make; shewing also that they have an intelligent comprehension that gymnastics is *a means to a great end*, by keeping up their attendance year after year, thereby perfecting their physical education; and, as a consequence, they learn to have that respect and proper care for their bodies which is so necessary for avoiding the numerous temptations to dissipation which lie so thickly around the path of the young.

To students, exercise presents itself with more than ordinary claims to attention, for, with the great mental strain arising from so many hours devoted to study, and the diminished vigor of circulation inseparable from remaining during long intervals in a sedentary position, it is of the utmost importance that some diversion of nervous force should be provided, and also by calling every muscle into play the circulation should be stimulated, and any undue flow of blood to the brain counteracted. By this means not only is study pursued with greater comfort, but the student is able to make what he reads his own, in other words, he can fully digest it. An overloaded stomach produces discomfort and sickness, instead of preparing welcome nutriment for the body, and an overloaded brain is equally unable to discharge its functions properly. I have been instructing the students of McGill College for so many years that I can speak without the danger of error, which is apt to arise from founding general conclusions on isolated cases, when I say that time devoted to the gymnasium, so far from being wasted, is actually time gained, from the increased capacity for study which an hour's exercise three times a week will insure. As a proof of this, I have had instances of students working for honors, who, after having absented themselves from the class for some three or four weeks, came back again, saying they found it impossible to get on without their usual exercise. Again, last session, a student sprained his wrist, and was unable to attend my class. He worked very hard for his examination, but was unable to go up

for it, as his health gave way: he afterwards told me that this would not have happened had he not been obliged to forego coming to the gymnasium, which he missed more than he should have thought possible.

Facts like these give a meaning and force to, and speak more loudly in favor of, systematic training than any amount of mere theorizing could do, and tend to elevate physical education to its rightful position, as an important and indispensable aid to mental education.

There is also another view which presents itself, whilst speaking of the many ways in which rightly conducted physical training benefits humanity, and that is, in counteracting the disposition to deformity which we often meet with in children, and which can, by giving such exercises as are proper for the age and strength, be entirely overcome; and not only so, but when deformity actually exists it can, where it is not of such a nature as to preclude any possibility of relief, be greatly improved, and in most cases entirely cured. There are many other troubles in which exercise is also specially beneficial, into which I will enter more particularly in a future letter, if you will permit me, as I must not trespass too much on your space.

I remain, yours very truly,

FRED S. BARNJUM.

Gymnasium and Academy of Physical Education,

19 University St., 16th November, 1881.

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Pharmacy

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THE HAYVERN CASE.

We publish in another column two communications on the Hayvern case, one from Dr. Henry Howard, the other from Dr. Vallée of the Beauport Asylum. Dr. Vallée goes over the case so thoroughly

that very little editorial comment seems requisite. We must again express our regret that Dr. Howard has not seen fit to submit to the profession a plain statement of the clinical facts upon which his diagnosis of insanity was based. The present age demands facts, not mere opinions; even alienist experts are not nowadays permitted to pronounce upon questions of insanity *ex cathedra*, but are expected to advance sufficient clinical evidence to substantiate their opinions.

The only point in Dr. Howard's communication which demands consideration is the question of Hayvern's temperature. Dr. Howard has misunderstood, and therefore unwittingly misrepresented, the evidence given by Drs. Vallée, Gardner and Cameron respecting Hayvern's alleged low temperature. These gentlemen, while admitting Dr. Howard's perfect good faith, were not convinced that such exceptionally low temperatures as 92.4° and 93.8° actually did exist in this case; they did not accept Dr. Howard's observations as trustworthy and reliable, because several obvious sources of error had not been guarded against. Dr. Cameron explained to Judge Monk how several fallacies might have crept in, and pointed out the means by which such errors should have been eliminated. They all testified that temperatures below 95° are commonly considered *collapse temperatures*, rarely met with except in defervescence after acute fevers, in alcoholic poisoning and cholera, the patient being then in a state of collapse. In speaking of these defervescence temperatures after acute fevers, Dr. Cameron said that the lowest collapse temperature recorded by Wunderlich, where recovery took place, was 92.4°, and the lowest recovery in children recorded by Roger was 90.2°. He did not testify that the lowest recorded temperature was 92.4°, but distinctly stated that in cholera and certain other affections the axillary temperature sometimes runs down very low indeed. Dr. Howard again seriously misrepresents the evidence when he says: "Dr. Cameron undertook to explain to the Court that this temperature, 32.2° and 30.6° was a higher temperature than that given by Dr. Howard, viz., 93.8° and 92.4° Fahr." During the cross-examination Mr. Curran handed Dr. Cameron a volume of the *Journal of Mental Science*, and asked him to read aloud to the Court an article entitled "Low Temperature in the Insane," which runs as follows: "Zenker has studied nine cases of lunatics where the bodily heat was found easily to sink, it fell in three cases as low as 32.2°, and in one case as low as 30.6°." At this point Mr. Curran triumphantly asked Dr. Cameron whether

32.2° was not very much less than 92.4°. The question was put in such a way as to lead the witness and other medical gentlemen in Court to infer that Mr. Curran was not aware that 32.2° was a centigrade reading, and that he wished to impress the Court and Jury with the great numerical difference between 32.2° and 92.4°. Dr. Cameron at once replied that Zenker's temperatures were centigrade, not Fahrenheit. Mr. Curran took the book, and after examining it asked what would be the Fahrenheit equivalent of these temperatures. The witness replied that 95° F. corresponds to 35° C., but that he could not tell the exact equivalent of Zenker's temperatures without making a little calculation; that at any rate 32.2° was not lower than the lowest case of recovery just cited (viz., 90.2°). He offered to make the calculation, but neither Mr. Curran nor the Court deemed it necessary. Had Dr. Howard and Mr. Curran been aware that Zenker's cases of 32.2° and 30.6° were centigrade readings, not Fahrenheit, and had they known the F. equivalents of these temperatures, as they ought to have done, they should have been in a position to correct Dr. Cameron in the event of error, and continue the cross-examination. Medical men are not supposed to carry always in their memories a comparative table of C. and F. temperatures, and moreover a witness box is not the easiest place in the world for arithmetical calculations, especially without the aid of pencil and paper. The fact that Zenker's temperatures were C. and not F. seemed to dawn upon Dr. Howard and Mr. Curran as a new revelation, and so filled them with surprise that the cross-examination was at once closed, and no more questions asked.

By thus criticising the evidence of Drs. Vallée, Gardner and Cameron, Dr. Howard endeavors to divert attention from the very strong objections raised by these witnesses against his own thermometric observations. The facts are as follows:—Dr. Howard examined the prisoner on Aug. 26th, and observed an axillary temp. of 93.8°; five days afterwards he observed an axillary temp. of 92.4°—collapse temperatures unaccompanied by marked symptoms of vital depression. Three weeks afterward Dr. Robillard examined the prisoner, and on six separate occasions (17th, 19th, 20th, 21st, 22nd, 23rd Sept.) found the axillary temperature invariably normal. In the face of Dr. Robillard's evidence, were Dr. Howard's observations correct? In a medico-legal case of such importance when the issues of life and death are at stake, it behooves the medical expert to be most accurate

in his examinations, and exclude carefully all possible sources of error. This, as Dr. Cameron pointed out, Dr. Howard failed to do, his observations being open to the following fallacies:

1. When Dr. Howard examined the prisoner, he found that "perspiration was pouring from every pore of his body, cold and clammy." The thermometer then registered 93.8°. Such profuse perspiration was of itself sufficient to vitiate an *axillary* observation, and render it useless for diagnostic purposes, unless corroborated by a *rectal* observation.

2. Clinical thermometers are sometimes very inaccurate, especially towards the bottom of the scale, as the slightest variation in the size of the fine capillary tube causes error. Personally we have seen a clinical thermometer possessing a Kew certificate, in which there was a certified error of between 2° and 3° at 90°. No record of temperature can be accepted as trustworthy, unless an accurate certified thermometer has been employed. Phenomenally high or low temperatures still more require the most positive proof, not only that the observation has been carefully made, but also that the thermometer employed was accurate and reliable. In Hayvern's case a certified thermometer should have been used, and when such exceptional temperatures were recorded the accuracy of the observation should have been verified by the use of one or more other certified instruments.

3. Assuming these low temperatures to have been correct, they were only *axillary* temperatures after all, and were of little value, unless confirmed or corrected by the observation of the *rectal* temperature. In clinical thermometry, the *axilla* gives the temperature of the *surface* of the body, while the *rectum* gives that of the *internal viscera*. The axillary and rectal temperature-curves usually run parallel, but sometimes they do not. In cholera, for example, the axillary temperature may be 90° or under, while the rectal temperature is normal or even higher than normal. A low axillary temperature might merely denote coolness of the general surface from profuse perspiration, a feeble languid state of the circulation, or a condition of general depression. Dr. Howard's observations of low *axillary* temperature in Hayvern, if confirmed or corrected by *rectal* observations would have been valuable; uncorrected or unconfirmed they were utterly worthless.

Drs. Vallée, Gardner and Cameron testified that temperatures below 95° are *collapse* temperatures, seldom met with, and generally fatal. They are quite in accord with generally received medical opinions upon this point. Wunderlich lays down the limits of recoverable temperature as ranging from 95° to 106° , 107° . He says that temperatures below 95° and above 107° are rare and usually fatal. Although this is the general rule, there may be exceptional cases of very high or very low temperature without invalidating the rule. For instance, in cases of spinal injuries, where the power of regulating the body—heat according to external conditions seems to be lost, we have several extraordinary cases recorded. Teale reports one in which a temperature of 122° persisted for some time without danger to life; Farquharson reports another in which a temperature of 81° did not cause inconvenience; and the *British Medical Journal* gives one of 75.5° , but nevertheless the general rule holds good. It is not an established medical fact that low temperatures are diagnostic of insanity. In both sane and insane low temperatures occur where there is collapse or a condition of great debility or general depression; high temperatures occur where there is excitement or exaltation; high or low temperature is not at all characteristic of insanity, but is found in those whose bodily functions are either exalted or depressed, whether they happen to be sane or insane.

In conclusion, while we do not underrate the value of such instruments as the thermometer, æsthesiometer and electric battery, we do most strongly protest against their being elevated to a position of such importance in the diagnosis of insanity as Dr. Howard seems to indicate. If we admit, with Dr. Howard, that the æsthesiometer and electric battery give *infallible* evidences of the existence of insanity, we make its diagnosis a very simple matter. We might train our hospital nurses to the skilful use of these instruments, and they would then be quite as competent to pronounce upon a patient's sanity or insanity as we would be ourselves. Such a doctrine cannot fail to do positive injury to the cause of science and bring the profession into disrepute; mechanical measures may give material aid, but can never of themselves afford reliable data for the diagnosis of insanity. A man must be the measure of himself; his mind must be the standard of comparison by which to determine his sanity or insanity, res-

pensibility or irresponsibility. The only safe way in such cases is to compare the individual with his former self; any measures which divert the attention of the medical man from this, his principal duty, are detrimental rather than helpful.

FIRST ANNUAL MEDICAL DINNER OF BISHOP'S COLLEGE.

In the Province of Ontario, Trinity College and the Toronto School of Medicine have, for a number of years, had, soon after the session opens, an Annual Medical Dinner, at which students, graduates, professors and friends attended. In this Province the Freshmen's Dinner was the only means adopted to introduce the new-comers to the rest of the class. It remained for the Medical department of Bishop's College to change this, and to follow the example of the Ontario Medical Schools. On the evening of the 7th of December between seventy and eighty students, professors, graduates, and guests of the Medical Department of Bishop's College sat down to their first annual dinner. It was held in the magnificent ladies' ordinary of the Windsor Hotel, and the *menu* was equal to the very best ever given by this now world-famed hotel. The tables were elegantly arranged with hot-house plants, and the entire floral decorations were under the direction of Mr. Bain, florist. The chair was occupied by Dr. F. W. Campbell, who was supported on his right by R. W. Henecker, D.C.L., Chancellor of the University, Mr. Smith, Consul-General for the United States, and Dr. Robillard; and on his left by Vice-Chancellor R. W. Norman, Thomas White, M.P., W. B. Simpson, Esq., Collector of Customs, and Dr. Hingston. The vice-chairs were very ably filled by Heber Bishop, B.A., fourth year, and Mr. William Patterson, jun., third year. The splendid band of the 6th Fusileers, under the leadership of Mr. Holland, played a selection of beautiful airs during the dinner, and appropriate pieces after each toast. Dr. Wood, the secretary, read letters of regret at not being able to be present from Sir John A. MacDonald, Hon. Mr. Chapleau, Hon. Mr. Robertson, Hon. Mr. Loranger, and the Hon. Mr. Lynch; also from a number of graduates. The usual loyal toasts were given, and heartily received. The toast of the Dominion Legislature was responded to by Thomas White, M.P., for Cardwell, who congratulated Bishop's College at the energy of its comparatively young Medical

Faculty ; Alma Mater was responded to by Chancellor Henecker ; the toast of " Dean and Professors " came from the 1st vice-chair, and was responded to by Professors Kennedy and Cameron.

DR. KENNEDY said :—As one of the older members of our Faculty it affords me much pleasure to respond to this toast. When I look around this board to-night, and see gathered together Professors, Graduates and Students mingling in friendly intercourse and enjoyment, I cannot but feel that as a Faculty we have every reason to be proud of the result of the efforts made during the years now past in establishing the Medical Faculty of Bishop's College. Those amongst us who can look back to its commencement well know what difficulties were encountered, difficulties which, in the earlier years, endangered our very existence, but which, as our meeting here to-night demonstrates, we have successfully conquered. A little over eleven years ago we launched our bark upon the sea of time, uncertain of the result, believing there was ample room for our existence, and not doubting but that we could materially advance the progress of medical education. Hoping for success we were not without the fear that possibly our efforts might prove a failure : that we have met with no uncertain success the number of our graduates will show. Many absent from us to-night are scattered widely indeed ; in Europe, in Asia, for even China holds a representative ; in South America we have men working their way to distinction ; and in Canada and the United States we are not unworthily represented. We thus prove that there was a place for us, and that medical education is not degraded by our existence. Many changes have taken place in the *personnel* of our Faculty during the past ten years : of the original eleven only four remain,—death, resignation and removal to other places accounting therefor ; and though we have lost men who did good work and were instrumental in making a name for the school, yet have we been so fortunate as to replace them by men equally as capable of maintaining that name and of continuing the work of their predecessors. In the choice of members this Faculty has ever made it a rule only to appoint such as were fitted for the position by their ability to teach and knowledge of the subjects to be taught. We well know that the work we have had to do has been no easy task, and when it is considered that from the first it was self-imposed, and undertaken with but the merest shadow of remuneration can it be wondered that it has been successful.

Failure is almost impossible with men earnest in their efforts, and believing in the mission they are called upon to execute. We have proved beyond a doubt that as a school we can bestow as thorough a medical education as can be obtained at any other medical school in the Dominion, and though we put forward no extravagant claim to superiority we certainly do claim that we are second to none. In the past twenty or more years medical science has advanced with rapid strides, necessitating the addition of considerable new matter to the subjects previously taught. Especially is this to be seen in the direction of practical demonstrations. Early recognizing the advances made in sanitary science, lectures on Hygiene were added to our curriculum of studies. This school not only being the first to teach this subject, but also the first to make attendance compulsory on the part of our students. Again the many new discoveries in Physiology led us to establish a chair of Practical Physiology, and for some years this was the only school in Canada in which the subject was practically demonstrated ; even now we may claim to possess a more varied and extensive apparatus for the purpose. The practical departments of Chemistry and Anatomy are also fully provided for ; and in the department of Practical Obstetrics we possess superior advantages. Among the early difficulties with which we had to contend was a want of confidence and support from the friends of the University which had accepted us as their medical faculty. Many were afraid that we would add but little lustre to its name. I think I am right in saying that we have done nothing to dim that lustre, but on the contrary, we have been the means of extending its name, enabling it to be recognized as a University indeed, lifting it, if I may be allowed so to speak, from being a local institution and confined to a particular portion of our population, into a position where it must exert a greater influence. It gives us much pleasure to note the establishment of a Faculty of Law, thereby increasing its claim to be called a University. I cannot pass on without a word of regard for our venerable Dean (unfortunately his infirmity prevents him from being present, but though absent in body I know that he is with us in spirit). If ever the history of the Medical Faculty of Bishop's College is written the name of Dr. David will be found prominent among the names of those who assisted at its foundation. There is no one living who knows

more or so much of the medical history of Montreal and of its medical schools than he does. Fully conversant with the details of such matters, no one was better fitted to assist in the early development of our school. Impressed as he was with the possibility of success, he earnestly devoted himself to advancing our interests, and for ten years ably filled the important chair of Medicine. Few men would care to undertake the labor of such work at his age, or to continue it as he did when fast increasing bodily infirmity rendered it no easy task to lecture. Few were as regular at their post, and not until it became impossible to continue did he relinquish his chair. That we have not been slow to recognize his ability and work is shown in that we declined to accept his resignation of the Deanship which we trust he may long continue to retain, and also as a special means of perpetuating his name in the school the Faculty established what is now known as the David Scholarship. In this connection I would make mention of the two gold medals which the Faculty has to bestow upon successful competitors, and it is rare for any school to possess two such valuable prizes so early in its history. One medal bears the name of a professor, the other the name of a member of a family distinguished in the medical history of Montreal. I refer to the Robert Nelson gold medal. This latter medal, given for a special purpose, was obtained through the interest and enthusiasm of one of our earliest graduates, himself a member of the family mentioned. It has ever been our aim to advance the well-doing of our classes, and as to-night we have successfully bridged over that dividing line which separates the student from his professor, it but makes apparent our desire to elevate the position of our students, and to show that we expect something more of them than regular attendance at lectures. The great extent and nature of the subjects now taught require much closer application on the part of the students than formerly, so that the average medical student of to-day necessarily becomes a much quieter and more studious individual than his old-time predecessor; he is therefore not what he is popularly supposed to be, and cannot be classified with the Bob Sawyer type of fiction. That our students appreciate the efforts made for their advancement, is shown by the interest they take in the prosperity of the school. Of one family two have already graduated with us, and a third is preparing to do likewise. The son

of another graduate is here with us to-night, expecting to follow in the footsteps of his father. These are facts which are encouraging, for, though comparatively a young institution, they show that we have cast off our extreme youth, and have attained an early and vigorous manhood. It is not necessary for me to occupy your attention any longer, especially as another response to this toast is to follow. I will therefore conclude with the wish that we may all live to see another ten years, and to gather around a like festive board in greatly increased numbers. At any rate I trust that, as we have thus joined together, this will be but the commencement of a series of annual gatherings which will tend to maintain that friendly feeling towards each other which at present so happily exists.

Dr. JAMES C. CAMERON congratulated the graduates and undergraduates upon the success of their first Annual Medical Dinner, and assured them that the social reunion of students, graduates and professors and the presence of the Chancellor, Vice-Chancellor, and other friends of the University, would not only tend to develop feelings of cordiality and friendship, but also make this a red-letter day in the history of the medical student in Montreal. Hitherto, the medical student has not been appreciated or understood, and has consequently been subjected to much undeserved censure. He has generally been regarded as a wild, reckless, lawless sort of fellow, fond of midnight rambles, and practical jokes, possessing an unconquerable antipathy to bell-pulls and door-knockers, and a propensity, Samson-like, to carry off the gates of the city in the dead of the night. His good qualities are generally observed and admired at a respectful distance, and he is not usually reckoned among the respected and respectable members of society, until he has emerged from his chrysalis state and soared forth a full-fledged M.D. Hitherto he has always been forced to dine and feast by himself, for even his professors have declined his repeated invitations, lest their presence might check the unrestrained flow of his *spirits*. But you, gentlemen undergraduates, have had the privilege to-night of manifesting to your friends and the general public that a medical dinner is not necessarily an orgie, and that the medical student can be and is a gentleman.

In speaking of the past record of our Medical Faculty, Dr. Kennedy has shewn you how largely

its success has been attributable to the energy, perseverance and enterprise manifested by its individual members. On behalf of the Dean and professors, I can assure you, gentlemen, that in the future this Faculty means to maintain the reputation it has so gallantly won ; if its members have worked hard in the past, they mean to redouble their efforts in the future, so as to merit a continuance of that success which is the reward of honest and faithful work. The aim of this College is to give a sound practical education. The vein of practical utility runs all through its curriculum. The practical nature of our obstetrical and surgical teaching has begun to attract general attention. We have recently enlarged, refitted and re-equipped our physiological laboratory, so that practical physiology will be more than ever a feature of our college. Our clinical advantages are unsurpassed ; our students have the privilege of attendance at three large hospitals : first, the *Montreal General Hospital*, which has become a household word owing to the surgical skill of such men as Campbell, Fenwick, and Roddick, and the diagnostic acumen and medical ability of such men as Howard and Ross ; second, the *Hotel Dieu Hospital*, which Dr. Hingston, our Canadian Spencer Wells, has made the chosen field for his triumphs in ovariectomy ; and, lastly, the *Woman's Hospital*, which furnishes unrivalled opportunities for practical instruction in the important branches of obstetrics and gynecology. Our aim, gentlemen, is to lay the foundations of your medical education broad and deep. We sometimes find the soil very hard and rocky, requiring a vast amount of blasting and hammering, picking and prying before we can get the foundation laid ; at other times the soil is sandy and loose, and needs a great deal of staying and bracing before it is strong and secure,—but, when once the foundation is laid, our task is completed, it remains for you to raise the superstructure. Your health, strength, talents, perseverance and opportunities will determine whether your structure will be but a modest little low-roofed cottage, or whether it will ambitiously aspire to the dimensions of a three or four storey city mansion, with cut-stone front, mansard roof and all modern conveniences.

Gentlemen, as you are no doubt aware, we are all *human*. Even you, gentlemen undergraduates, though you may hardly credit it, are sometimes in *professional* eyes decidedly human—when for instance you slope our lectures, more particularly our grinds ; when out of consideration for your overworked

professors, and from the kindness of your hearts, you vote us an occasional extra holiday ; when sometimes during our lectures, your eyes are heavy and red (of course from prolonged study the night before) and you doze peacefully over your note books, regardless of our eloquence ; when you fail to appreciate our anecdotes or see the point of our little jokes ; and, above all, when you fail to demonstrate to each professor that you regard his particular subject as by far the most important branch in the whole curriculum.

And, no doubt, we, your Dean and Professors, seem to be in *undergraduate* eyes, at times somewhat human—for instance, when, with astonishing perversity, we persist in grinding you minutely upon the very subject which you thought so unimportant and omitted to read up ; when during examination time we make our questions so ridiculously *easy* ; when we do not place every one of you in first-class honors ; and, particularly, when we fail to see the force of the student's logic, which demonstrates so conclusively that one can not have too much of a good thing—that if *two* consecutive holidays are good for the students, the benefits derivable from *three* must be proportionately greater. Being thus generally satisfied that we are all human, let us strive to overlook each others' imperfections and shortcomings, and rise above petty little jealousies and disagreements. Let us realize the fact that in the pursuit of knowledge we all, professors and students, are fellow-pilgrims, climbing the same rugged mountain, bound for the same distant goal. We, your professors, have somewhat the start of you in point of time, and have attained a position somewhat higher than yours. We stretch out our hands to help you : some may never reach our level, others may far outstrip us in the ascent. To-day you are our students—ere long you will be our confrères, companions and trusted friends. Let us then hope that this, our first Annual Medical Dinner, will be the means of developing a mutual kindness of feeling and an *esprit de corps* which will contribute greatly to our own happiness and advance the best interests of our University.

"Sister Faculties" brought to their feet representatives from the Art, Law and Theological Faculties of Bishop's. Mr. Scott, (son of Dr. Scott of Montreal) represented the latter Faculty, and made a very elegant little speech, and delivered it admirably. "Sister Universities" brought Mr. Cousins, a medical student of McGill to his feet.

He spoke of the *entente cordiale*, which existed between the students of McGill and Bishop's, and of the progress which medical science was making. To this onward march he believed Canadian physicians were contributing, and he was sure no school jealousy would prevent those connected with Bishop's from admitting that foremost among them stand one connected with his school, Dr. Osler, who, as a pathologist, had a reputation which was rapidly becoming world-wide (Dr. Osler's name was received with loud applause). A representative from the students of Victoria and Laval schools also responded. "Our Graduates" was responded to by Dr. J. F. T. Jenkins.

Dr. JENKINS said: Mr. Chairman and Gentlemen,—In responding on behalf of the graduates I feel much as I did some years ago when delivering the Valedictory of my class. The dignity of the charge impresses me with the weight of its responsibility. I have to tender to you the thanks of the men who are scattered from pole to pole of this earth. From Hong Kong, China, from the Sandwich Island, the West Indies, Panama and California come greetings from absent ones. They who for so long a time battled in the effort to master the difficult and intricate paths of the grand science we have adopted are each working out their respective destinies. Though the scenes they have known here know them no more forever, yet deep down in their hearts have they engraven an image more durable than the temples of gods; and with each succeeding year do they watch with pleasurable emotions the events transpiring 'neath the grand old walls of the University.

Let fate do her worst, there are relics of joy—
Bright dreams of the past, which she cannot destroy.

It may be superfluous for me to say that Bishop's College shall ever have a warm place in the hearts of her graduates. If in the professional arena we be enabled to win any honors we shall cast them as trophies at her feet. If by the way-side we pluck any bright flowers we will wreath them into garlands, and as offerings of love twine them around the portals of this our Alma Mater.

It is to the Alumni that the University must owe her future success. By the offspring is the parent judged, and in return for the loyalty of her sons her reward should be bestowed only upon them. It would look ill for a college if men could not be found within its own circle capable of filling any of the positions in its gift. We will honor our University as she honors us, as we hope her enduring progress and lasting renown will shed

lustre on our names in all our future careers. We have no just cause to doubt the perpetual life of the college: *it never stood on fairer grounds than to-day; it never ranked higher with the medical schools of America and of Europe; it never possessed more largely the affections of its children* who now send their students to their old mother for professional training. She will be perpetual! Our names upon her records and archives will be handed down forever. *Will we not endeavor to add to her imperishable fame?*

Among the proposed changes, as far as the graduates are concerned, is a complete remodeling of the Alumni Association. It has been suggested to offer medals and prizes in money for meritorious papers, based on original investigation and research. I am happy to state that a fair amount has already been subscribed, having that end in view. Another effort is to be made to establish a university paper—each of the faculties is to be represented. It has been clearly demonstrated that such a paper would be entirely self-supporting. It would be highly proper that we who draw our commissions from a common source should know more of each other, and for various reasons this object could not be so well accomplished in any other way.

There seems no better evidence that Montreal is a favorable site as a great seat of medical teaching than the fact that the field has already invited this flourishing school. These rival institutions in Montreal should not be unwelcome to the true friends of education. They should be encouraged. Let them contend, and successfully, for position. Give students the full benefit of competition, as they press hardily in the race upon our learned professors. Our places are by the side of our own men: to encourage, to uphold, to sustain them in awakening energy, in renewed zeal, in yet higher achievements and grander successes as great medical teachers. Our duty is not to pull down our neighboring school, but to build up our own higher and yet higher, keeping it ever in front that we need not say to our rivals, halt, but come on, for ever! It is our duty to see to it that, as Montreal develops into a great centre of medical teaching, no rival shall outstrip Bishop's, but that she shall be kept ever in the van, growing with the years, for the example and emulation of all rivals. All graduates join me in the wish that she may be grandly successful and perpetual in the dissemination of learning.

"The Class of 1882" was responded to by Mr. J. W. Cameron.

Mr. J. W. CAMERON said: In replying to the toast just given in honor of the graduating class of 1882, I cannot refrain from saying that, had I anticipated the arduous nature of this task, I would assuredly have declined the honor of acting as their representative on this happy occasion. I am sure that the company here assembled will fully understand this statement, and will appreciate my motives of extreme diffidence and delicacy, when I inform them that our class is composed of somewhat strange and incongruous elements. Some of our number, Sir, are short men—and yet with a rotundity of form which caused a celebrated author to exclaim:

"What tempest threw this whale ashore at *Bishop's*?"

Others again are tall, very tall, and these like Cassius of old have a "lean and hungry look, they think too much." A few of our number rejoice in married life, and already have become

"Most potent, grave and reverend seigniors,"

while those that remain are unfortunately single like myself, with no cheering smile to greet them after the day's laborious duties are finished, and, what they regret most, no excuse for late appearance in the class-room in the morning.

But, Mr. Chairman, though in those respects we are so different, yet there is one platform upon which we are all united, one subject for mutual and cordial congratulation,—I mean the splendid success of our gathering this evening. This medical dinner is the first of the kind ever held in Montreal, and the brilliancy with which it has been carried out augurs well for its yearly repetition. It has always been customary in this and other colleges to hold an annual Freshman's Dinner, at which our verdant medical friends were introduced to student life among their predecessors, vowed everlasting friendship to one another, and went home, or at least got home in some manner needless to explain, fully imbued with the idea that they were a great credit to their college. This year we have ventured upon a new departure, we have abolished the ancient footing dinner, for "its usefulness was gone," and in its place we have established an annual reunion to which our friends and professors lend grace by their presence; while it is conducted in such a manner that even "*gentlemen of the Cloth*" do not find it inconsistent with their principles to be present. Let us then hope

that this may prove the first of many similar gatherings, and when we shall pass from our Alma Mater and enter upon our professional duties, amid its trials and vexations, will it not be encouraging to feel that we are not forgotten. for by the acceptance of our annual invitation we again revive the associations of student life, form the acquaintance of new medical friends, and enjoy a reunion with our professors whom we so greatly esteem. and from whose stores of knowledge and experience we have so largely drawn. In conclusion, allow me on behalf of the class to present to our guests and friends our warmest thanks for their presence and very kind remarks, which have contributed so much to the success of the evening, while our professors and graduates know full well the esteem in which they are held by us, and do not need at my hand any lengthened eulogy, but I think I will fairly express our sentiments by concluding in the words of the poet:

"When Time, who steals our years away,
Shall steal our pleasures too;
The memory of the past will stay,
And half our joys renew.

Other toasts followed, and a right merry time was had. A little before two in the morning, as clear-headed a lot of diners as ever rose from a public dinner departed from the Windsor, and the reason was that the dinner was conducted upon *absolute* temperance principles.

THE NEW MEDICAL TARIFF.

Whether it was a wise or an unwise act for the profession of this Province to secure for their incorporated representatives power from Parliament to frame a tariff, is a matter which admits of discussion; but we think there is little doubt in the mind of any that a serious mistake was made in making only one tariff for cities and the country. The blame for this rests upon the shoulders of country practitioners, who insisted that the services which they rendered were of equal value to that of their city brethren. This argument, admitted as being true in the abstract, was shorn of its entire force, when custom was considered, and the relative cost of living taken into consideration. The one tariff rate was, however, carried, and in at least one section of the country the out-cry against it has been so great that its modification or repeal was the election cry during the late Provincial election. In the County of Brome the Solicitor General, the

Hon. Mr. Lynch, nearly lost his election on this question of the Medical tariff, and a more unjust cry was never raised against a political opponent. He was variously accused of having introduced the Bill which gave authority for the tariff, and, secondly, of having recommended its adoption by the Lieut.-Governor. The first charge was untrue, and the second, although partially true was simply a matter of routine.

But among a rural population, many of whom have but the faintest idea of the value of a physician's services these charges were believed, and their assumed author thought deserving of rejection by his constituents, whom he had otherwise served faithfully. So far as we can learn, it was not the smaller items of visits, &c., which caused the alarm, but the large sums put down for major and special operations. One *gentleman* is reported to have said, "there now, how could I afford to pay \$500 if an *ovariotomy* had to be performed on *me*." And yet a man, with an intelligence capable of making such a statement, is often a power in political contests. Mr. Lynch in his address promised to get the tariff repealed, and, honorable man as he is, we have no doubt but that he will try to be as good as his word. It was perhaps necessary to make this statement to save himself. If so, we regret it, for it compels him, in all probability, to take action, previous to the meeting of the College of Physicians and Surgeons. We say that we regret it, for we feel assured that if action by the Legislature can be stayed the Governors of the Provincial Medical Board will, in all probability, see their way once more to adopt a separate tariff for the country, and make it fair and reasonable as was the tariff of 1877. In Montreal, through the *Daily Star*, a number of correspondents attempted to create a feeling against the tariff, with but very partial success. They led to patients making, in a few instances, enquiries from their Medical men, and receiving replies which were satisfactory. So far as cities are concerned the tariff which came into force on the 21st of November last, as a maximum tariff, is not at all an extravagant one; on the contrary, it is fair and reasonable—exceedingly so, when compared with the prices paid in cities of over 50,000 inhabitants in the United States. Whatever may be the result of the cry raised in Brome, we trust our friend Mr. Lynch will act with caution, and, while keeping faith with his constituents, avoid acting unjustly toward a

class of professional men who are eagerly sought after when pain, pestilence and death abound in the land, but the value of whose services fade with returning health.

COLLEGE OF PHYSICIANS AND SURGEONS, P.Q.

The College has obtained judgment against Richard Birch of East Templeton for practicing without a license. The defendant has left the Province.

WYETH'S WINE OF BEEF, IRON AND CINCHONA.

(VINUM CIBI ET FERRI CUM CINCHONA.)

The admirable tonic and anti-periodic properties of Cinchona or Calisaya Bark, have been for so many years past universally recognized that they need not be insisted upon. In the above-mentioned preparation, which is especially adapted to cases of recovery from fevers (in this country so generally tinged with a malarial type), Wyeth's Wine of Calisaya Bark, to which they have always paid great attention, is made the vehicle for introducing into the system the extract of beef together with citrate of iron. Hence, they claim for this article, as a whole, pre-eminent virtues; combining, as it does, the stimulant, nutrient, chalybeate and tonic powers of its several ingredients.

PERSONAL.

Dr. Imrie (M.D., C.M., McGill, 1879), late House Surgeon of the Montreal General Hospital, and acting for a short period as Surgeon on the Allan Line of Steamships, has returned to Montreal.

Dr. H. B. Chandler (C.M., M.D., Bishops, 1880, and Wood Gold Medalist) has just completed his year as House Surgeon to St. Peter's Hospital, Brooklyn (150 beds). Dr. Chandler passed through Montreal the middle of November, *en route* for the West, where he intends to settle.

Dr. Wolfred Nelson (M.D., McGill and Bishops Colleges, 1872) formerly of Montreal, is now engaged in most extensive practice at Panama. From the *Panama Herald* of the 27th of October we learn that the contractors for the Canal Company are engaged building hospitals for their employees, and have placed them under the direction and care of Dr. Wolfred Nelson.

Dr. George W. Nelson (M.D., Bishops College,

1880 and final Prizeman of his year), has left Montreal, and for the present joins his brother, Dr. Wolfred Nelson at Panama.

Dr. Lunar (M.D., McGill, 1881), has settled in Campbelltown, N.B., replacing Dr. Balcom, who intends proceeding to the North-West.

Dr. Bell, Medical Superintendent of the Montreal General Hospital, is convalescent from typhoid fever and has resumed his duties.

Dr. Vineberg (M.D., McGill College, 1879), after visiting England, Australia, New Zealand and the Sandwich Islands has returned to Montreal in improved health.

Dr. George J. Bull (M.D., McGill College, 1869), who for a number of years practised his profession in Worcester, Mass., was obliged last year, owing to ill-health, to relinquish work, and remove to Colorado Springs. His health, we are pleased to know, has been restored, and we learn that he has decided to locate permanently there.

Dr. Eneas (C.M., M.D., Bishop's College, 1874), for several years in the service of the Government of British Guiana as a District Medical officer, is at present in Montreal on six months' leave of absence.

REVIEWS.

We have received from Messrs. Drysdale & Co. a copy of a new periodical list prepared by them. The list is very complete, and will prove of great service to all parties desiring to take up new periodicals for the ensuing year. Messrs. Drysdale & Co. will gladly send their list to anyone on application.

The Medical Record Visiting List for 1882. New York: Wm. Wood & Co. Montreal: J. M. O'Loughlin.

This Visiting List is complete, compact and convenient. A number of useful tables and formulæ are appended; the paper and binding are excellent; it is well arranged and clearly ruled, and is published in two sizes, one for thirty patients per week, the other for sixty.

Lectures on the Diagnosis and Treatment of Diseases of the Chest, Throat and Nasal Cavities. By E. FLETCHER INGALS, A.M., M.D. New York: Wm. Wood & Co. Montreal: J. M. O'Loughlin.

The author professes in this work to present a complete exposition of the subject of Physical Diagnosis as far as it relates to diseases of the chest, throat and nasal passages; to point out the symptoms and signs which are of most value in a differential diagnosis; and to outline the treatment for the various affections. The author has attempted too much, and has consequently impaired the usefulness of his book; the tables of differential diagnosis are fairly good, but the notes on treatment are short and unsatisfactory, and do not enhance the value of the book as a clinical manual. The paper and printing are good; the publishers have done their part of the work in a very creditable manner.

Text Book of Modern Midwifery. By RODNEY ELISON, M.D. Philadelphia: Peasley Blakiston. Montreal: Dawson Bros.

The author of this work does not consider that American obstetric practice is fairly treated in modern treatises on midwifery, and therefore embodies in this text book the results of his labors. We fail to find anything original in it, certainly not in its general arrangements or its illustrations, which are chiefly borrowed from the works of other authors. The style is somewhat labored in the effort to make an original compilation, for that is all that can be claimed for it. As a text book the student will find it contains all that is essential on the subject of midwifery.

A Manual of Ophthalmic Practice. By HENRY S. SCHELL, M.D., with fifty-three illustrations. Philadelphia: Dr. E. Brinton. Montreal: J. M. O'Loughlin.

In this book the writer briefly embodies the principles of ophthalmic practice, and has succeeded in producing a work that cannot fail to be of use to the students of ophthalmology. The chapter on the ophthalmoscope will be found very useful to the beginner, and also the chapter on refraction and accommodation,—this latter subject is treated very fully, instructions on the use of lenses, the manner of testing the sight, and the treatment of the various defects of vision by spectacles making it of great value. The other portions of the work deal with the various diseases met with and their treatment in a concise manner. A sheet of test types is appended at the end of the book, which will be found useful for office practice.

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Original Communications.

A CASE OF ACUTE TUBERCULOSIS.

Read before the Medico-Chirurgical Society of Montreal,
Dec 23rd, 1881.

BY

J. B. McCONNELL, M.D., C.M.,

Attending Physician to

the Montreal Dispensary, Women's Hospital,
&c., Professor of Botany, University
of Bishop's College, Montreal.

I bring before you this evening the following history of one of three cases of acute tuberculosis which I met with during the last Autumn, occurring in children under the age of seven months, and all passing rapidly to a fatal termination. In the present instance only was I able to obtain an *autopsia cadavericum* which only could make a case of this kind either interesting or very instructive.

This child first showed symptoms of the disease at the age of three months; up to that time had been tolerably healthy and well-nourished. The mother had just recovered from an attack of bronchitis which had been severe and prolonged, but she had continued to nourish her infant.

There is no history of any tuberculosis affection on the mother's side, but the father had two sisters who died of consumption. There is but one other child in this family, which has also shown evidence

of a delicate constitution. I first saw the child in regard to this affection on the 13th August last. For a week or two previous it had a slight, dry, hacking cough, which had gradually got worse; there was difficulty in breathing and occasional vomiting, the bowels were regular, and child nursed well. The most prominent symptom at this time was the marked interference in the function of respiration, the air entered the lung as if there was some obstruction in the larger bronchi, and expiration was prolonged and accompanied with a wheezing sound which could be heard at a considerable distance from the patient. When the paroxysms of cough came on the dyspnoea was very marked, the head and neck became flushed and twisted, showing great distension of their vessels, the attacks resembled in fact those of asthma; the breathing was more free during sleep; there was no elevation of temperature, but the pulse was a little quickened. On examining the patient the lower part of the chest was observed to be retracted during inspiration; percussion gave a full note at all points on the surface corresponding to the upper and middle portions of the left lung, more marked at the apex above and between the scapula and skin behind; the note was clear on the right side. Auscultation discovered loud tubular breathing in the same regions, with a variety of loud whistling and wheezing noises, and a few rales; the normal puerile vesicular murmur was barely audible on the left side, being drowned by the sounds conveyed

from the affected lung. I suspected the existence of one or more enlarged bronchial glands pressing on the bronchi and mechanically interfering with respiration, and possibly some of them involving the recurrent laryngeal nerve in their enlargement and by spasm diminishing the calibre of the passages to the lungs, as the only plausible explanation of the obstruction to respiration. The treatment adopted was the administration of a cough mixture containing sedative antispasmodics and $\frac{1}{2}$ gr dose of potassi iodidum cod-liver oil with the hypophosphites of lime and soda, and the application of tr. iodine diluted, to the chest. The symptoms continued about the same up to the beginning of October, the child nursed well, and did not appear to lose any in flesh. The paroxysms of cough sometimes produced great distress, the countenance becoming suffused and livid, and on one or two occasions suffocation appeared imminent; the act of swallowing, as when taking food or medicine, would bring on the attacks of coughing.

About the middle of October the various symptoms referable to the trouble in the chest had gradually subsided until the cough disappeared, and wheezing ceased to be apparent.

The child, however, still seemed ill, was very pale, and perceptible emaciation evidenced a failure in the nutritive functions: It would lie very quietly during the day, but was restless and peevish at night. The bowels were confined, and there was frequent vomiting. Towards the end of the month these symptoms became more marked, and there was slight fever at night, and child was very restless, would awaken from its troubled sleep with a shrill cry and roll its head about from side to side, and again fall asleep; would not sleep at all sometimes until the head was kept raised up in its mother's arms, and would waken when laid down; there was also occasional twitching of the muscle of the extremities.

On the 31st October there was still complete absence of all bronchial or pulmonary symptoms, excepting a little irregularity and inequality in the breathing, and those of tubercular meningitis were actively disappearing. The child cried continually when awake, and the short snatches of sleep were frequently disturbed with sufferings which were made apparent by the peculiar sharp *hydrencephalic* cry. There was continual twitching of the muscles of the extremities and neck, more marked on the left side, and continuing during sleep. Pupils were moderately dilated, and the

abdomen appeared somewhat extracted, vomiting frequently, and always after nursing or taking anything with the spoon. Tongue is clean and moist, and the bowels for a day or two have been regular, the passages having a greenish appearance. Child dislikes to be touched or moved and lies mostly on its side. Temperature was not raised, and pulse but slightly accelerated; scalp over the anterior fontanelle (the opening of which is nearly two inches in length) is tense and slightly bulging.

Nov. 2nd.—Child is in a drowsy, somnolent condition, lies on its back chiefly, and is exceedingly quiet, does not cry, and breathes imperceptibly with the mouth open, as if the muscles of the jaw were partially paralysed; the vomiting has ceased, and child does not nurse as much as usual; bowels moved twice, first time natural, second passage greenish, and apparently accompanied with pain. Head is thrown backwards most of the time, and the muscles of the back of the neck are contracted and rigid. Face is very pale, with occasional flushings, especially when child is disturbed in any way. The eyelids are only partially closed, and the eyeballs oscillate in various directions; there is also occasional squinting. The peculiar coloration left on the skin after pressure on the *trachea cerebral* is also evident. Mother states that there was a slight convulsion to-day, lasting only a couple of minutes; the child became stiffened, respiration ceased, and eyes were turned up. Temperature is normal, and pulse only 80.

Nov. 3rd, 3 a.m.—Has been in convulsions for about two hours; there is a continuous succession of clonic spasms; trunk is stiff. Marked carphologia and strabismus; is perspiring profusely, face is flushed, eyelids do not close, eyes have a vacant stare, and are insensible to the touch, pupils are widely dilated, soft parts over the anterior fontanelles still elevated, tense and throbbing. T. 102°, P. 240, R. 102, the breathing is accompanied with a moaning cry, and is irregular and unequal, consisting of a succession of quick inspirations, growing in intensity, and ending in a deep, prolonged sigh or sometimes in short expiratory moans.

11 a.m.—The clonic spasms continued until about 5.30, since then has been more quiet; pulse is too rapid to count and scarcely perceptible at the wrist, eyes are drawn up and oscillating slowly from side to side, pupils widely but equally dilated; is perspiring freely, surface is clammy, respiration difficult and stertorous, head, neck and upper portion of body curved backwards in a condition of opisthotonus.

The region over the anterior fontanelles has become sunken and presents a deep elongated depression, tongue is dry, and the child is becoming rapidly exhausted.

Death took place in evening from a gradual failure of the powers, without any further convulsive attacks.

Post-mortem examination, conducted by Dr. T. Wesley Mills, 36 hours after death.—Rigor mortis indifferently marked, body not much emaciated. *Head*—Posterior fontanelle closed; anterior widely open and depressed. Brain and membranes intensely congested, a black tar like substance occupying a position on the surface corresponding to the sulci. A few miliary tubercles found on the dura mater, which was firmly adherent at some parts to the cranium.

Pia mater exceedingly thickly studded with miliary tubercles of varying size, especially abundant along the course of vessels. A moderate effusion of yellowish plastic lymph over structures lying along median line and base of brain, about one ounce of blood-stained serum escaped on removal of brain. Tubercles found over cerebellum in great numbers, as they are in every part of the brain.

Lungs—*Right* studded throughout with miliary tubercles; no solidification. *Left* has a middle lobe; the whole lung is crammed with miliary tubercles, upper and middle lobes abound in aggregations of caseous material representing, probably, the lobules and suggesting caseation from lobular pneumonia, the whole making a lobulated caseous mass. Nearly all the upper portion of the organ was solid; some parts in middle and lower lobes floated in water.

Two or three post bronchial glands were caseous and as large as an almond.

The *Spleen* was covered with miliary tubercles, and had the same in fewer numbers within. The liver and intestines were free from tubercles, two white patches existed on the liver, one to two lines in thickness, suggesting fatty degeneration. The mesenteric glands were enlarged but not distinctly caseous.

The chief features of interest in this case are :—The early age at which the disease developed; the fact of nearly every form of the disease having occurred in the same subject. The symptoms as well as the post-mortem appearances would indicate that the disease began in the left lung, which was the focus from which other parts of the economy were infected. The pulmonary symptoms were

speedily followed and overshadowed by the symptoms of a well-marked instance of bronchial phthisis, and these again were entirely replaced by all the phenomena observed in an ordinary case of tubercular meningitis, only that the different stages succeeded each other at shorter intervals than is usual.

The manner in which all the symptoms were explained by the anatomical lesions found is also noteworthy, as you have seen in the specimen exhibited. The left primary bronchus is surrounded by two coalescent enlarged caseous glands, which almost cut off the entrance of air into the left lung, thus explaining the labored breathing; the great abundance of the miliary tubercles discovered in the meningeal structures being found since on the pia mater is also a feature, as you will observe, in Dr. Mills' report. No gray-granulations were discovered associated with the crude tubercles—a condition which obtains much more frequently in the phthisis of children than that of adults. The absence of any cavities in the lungs, which is the most striking peculiarity in the phthisis of children as distinguished from that of grown-up people, was the condition also in this instance.

Correspondence

Editor CANADA MEDICAL JOURNAL.

DEAR SIR,—In my letter of the 16th ult. I spoke of the benefits to be derived from systematic exercise, as a means of attaining a high degree of health and strength. I will now with your permission speak of its applicability in cases of deformity, both actual and threatened, and also where there is loss of power in one or more limbs as a result of paralysis. As regards the first: lateral curvature of the spine is the form with which I am most frequently brought in contact; the greater number of cases being girls. This affection is of course entirely beyond the reach of medicine, which can only be given for the general health, but in no way affects the deformity; for which duly regulated exercise is the only available remedy. I have had a number of patients sent to me at various times by medical men; and where the deformity had not progressed too far, the results have been very satisfactory. Insidious as this complaint is in its approach and development, yet there are warnings thrown out which, if regarded as they should be, could afford

timely notice of danger ; and this brings me to the second point, viz : threatened deformity. I very frequently have girls brought to me by their mothers seeking some means of rectifying the "habit of stooping." On examination I invariably find that the so-called "habit" is nothing more than a very natural effort on the child's part to relieve the weak muscles of the back, the trouble being there and not in the shoulders. The worst instances of this stooping are overgrown girls, who are actually unable to support themselves in an erect position, and whose projecting shoulders and rounded backs are not the worst feature. For they necessarily involve a flattened chest, accompanied of course by imperfect inflation of the lungs, and also furnish a most inviting field for lateral curvature of the spine.

I had a young lady brought to me a few weeks ago by her father, who stated that "*her neck was too far forward.*" I smiled, and replied that I fancied that it was rather an unusual state of things, and then proceeded to examine the subject of this supposed abnormal arrangement. I found her very tall for her age, with the muscles of the back exceedingly weak, the shoulders of course projecting forward, the chest sunk, and a distinctly developed double curvature of the spine to the right. Her father was perfectly astonished when I stated the result of my investigation, and innocently inquired whether a six months course in my class would not rectify all this.

I need not say that I soon disabused his mind of the notion, that what had been creeping on for years could be summarily disposed of, as a blacksmith would straighten a piece of iron by a few blows of his hammer.

I consider that it would be better for all children were their bodies to be trained with the same regularity as their minds, but in cases where there is the slightest possibility of any deformity occurring, then it is undoubtedly the duty of parents to place their children under the care of a qualified physical educator. I have had numbers of delicate children under my care who after two or three seasons were so changed in appearance that it was difficult to believe they were the same who had at first commenced their exercises in such a feeble manner. It is to me a source of great delight to watch the gradual improvement of my little pupils. The chests expanding, the little backs straightening, the heads held erect, and the limbs increasing in bulk and power. But I have said

enough on this point, and will now proceed to another and very important part of my subject : and that is the case of persons affected with a loss of power and control in one or more of their limbs, as a result of paralysis. The exciting cause may have been removed, yet the nerves have not recovered their functional ability. In these cases exercises suited to the particular need of the patient can be employed with excellent results, and in the majority of instances a perfect cure can be attained.

I will mention one case out of many : A gentleman from England was staying in this city, and came to me, stating that he wished to go through a course of gymnastics, but was suffering from loss of power in the upper portion of the left arm, which had been paralysed. By my advice he took certain exercises, and after a few weeks began to improve very much, and at the end of twelve months his arm was completely restored ; but not to its original strength only, for both that and his whole body were brought into a far better condition than ever. In taking leave of me before sailing for England, he acknowledged the great benefit he had received, and told me he had spent a great deal of money in seeking relief, had tried electricians, etc., but received no benefit until he came to me ; and now he was returning home perfectly cured of his trouble, and a stronger man than he ever was before.

I have briefly endeavored to shew that the gymnasium can be more than a place of exercise for those in a normal condition, and can meet the needs of a large class, who as a rule would never think such a thing possible. I have long combated the idea that a gymnasium is a mere anteroom to the circus, but it is very hard to wage war against long established notions and prejudice. I must express my sense of the enlightened view of the subject taken by many eminent medical men in this city, who have strengthened my hands wonderfully, and without whose aid and countenance I should have found the work far harder. To the profession generally I would say that any cases they may send me shall receive every attention.

I do not pretend to usurp the functions of a physician, but having for many years devoted my attention earnestly to physical education, I may say, without laying myself open to the charge of vanity, that I know something about it.

I believe firmly that exercise possesses resources which can be made available in a great

many more instances than the majority of persons are aware of. Perseverance and patience are, however, requisite; and I always honestly tell people so. I do not pretend to effect cures by "a hop, step, and a jump," but by simply co-operating with nature, and proceeding in accordance with her laws.

Yours very truly,

FRED. T. BARNJUM.

Gymnasium and Academy of
Physical Education, 19 University street,
29th December, 1881.

Progress of Medical Science.

TREATMENT OF DIABETES MELLITUS.

By PROFESSOR FLINT.

The treatment is emphatically dietetic. There have been a great many remedies proposed from time to time, recommended as having control over this disease. Now I am not prepared to say there are no remedies which do exercise more or less control over it, but we should commit a grave error, and act very much at the expense of the prospects of our patients, if we gave any remedy which rendered them less careful in attending to the dietetic treatment. In other words, the dietetic treatment is to hold the first place. This treatment consists in withholding from the food almost entirely (for entirely we cannot) sugar in any form, and all the starchy constituents of diet capable of being transformed into sugar. That is the principle. Well, if we merely state that to patients, and tell them they must not eat sugar, they must not eat starch, they will not be likely to carry it out. In the first place, it is not likely they will know enough of the subject to be able to carry it out, even if they were so disposed; and unless we go further, and are very careful as regard details, we shall find that the elimination of these constituents of the food will not be done; they will not tolerate it. If we are to succeed we should give appropriate attention to the preparation of the food, the number of the articles which the patient should be allowed to take, and the variation of the food from day to day, to make this anti-diabetic diet satisfactory to the patients; that is, satisfy their appetites and the purposes of nutrition. This can be done, and if it is done the patient carries out the treatment, because it is no hardship to carry it out; and the treatment is to be carried out not for a few days, or a few weeks, or a few months, but for an indefinite period—for years and perhaps during the whole of life.

How is this second object to be effected? We must place before the patient a list of all articles of food which are to be avoided, specifying them; not contenting ourselves with the statement in

general terms, but specifying on the one hand all the articles of food which he must not take and on the other hand all the articles of food, animal and vegetable, and so on, which he may be allowed to take. He should have such a list before him, and such articles should be selected from the allowable ones as to make a variety from day to day, and so prepared by the artifices of cookery as to render them satisfactory. It can be done, but it requires patience and it requires care on the part of the patient or somebody else, and it requires some means. A very poor man, who has no one to look after these matters for him, and who has not sufficient means to obtain all the articles of food which are desirable, will find it very difficult to conquer this disease; and in certain public institutions—this hospital, for instance—it is very difficult to carry out the proper dietetic treatment. It requires so many things and so much attention to details that the dietetic treatment is very unsatisfactory in public hospitals.

The article of food which will cause most trouble is bread, and diabetics realize the force of the statement that bread is the staff of life. Frequently they say at first that they care little for bread, and can get along without it with no trouble; but they do not find it so after a while. They find that there is a craving for bread, and they feel that they cannot do without it. So there have been various substitutes for it. There is what is called the diabetic flour, which is bran very finely ground, so as to divest it of all rough particles; but it has no nutritive quality whatever. It is really no better than saw dust, so far as nutritive value is concerned, and the patient adheres to it only a short time. For the past two years the patients that I have seen have been in the habit of using a bread which so far seems to be very satisfactory, but it is not entirely divested of starch. It is what is called gluten bread, prepared by the Health Food Company, corner of Tenth Street and Fourth Avenue, of this city. Analysis shows that it is not entirely divested of starch, but it is so prepared that it is not deprived of the agreeable qualities of ordinary bread. Last winter I brought a loaf of that bread before the class and distributed it. I like it to eat myself, finding it by no means disagreeable; and patients take this bread and it meets their wants, thus removing a great obstacle to the successful dietetic treatment of this disease.

I do not deem it necessary to go over the entire list of these dietetic articles. You will find them by reference to different works. But the thing to do is to go into minute details with the patients. Explain to them fully just what is to be done.

Well now, after they enter upon this course of treatment in a very considerable proportion of cases the sugar diminishes at once, and sometimes it speedily disappears. Of course we should examine the urine from time to time to determine its condition as regards the presence of sugar and the amount of sugar. This treatment does not cause a disappearance of the sugar in all cases. I have a patient

under observation now whom I saw for the first time about three weeks ago—a young, thin, intelligent man, who, I have reason to believe, adopted the anti-diabetic treatment and has carried it out fully. I prescribed no medicine at first, and that has been my custom, in order to see what the dietetic treatment will do of itself. In this case it has accomplished very little so far; and this case I am led to fear therefore will be one in which we cannot expect much success from treatment of any kind. If the dietetic treatment does not succeed we have no other resources; that is, no medicinal remedy yet known will succeed. It may have a certain influence over the disease, but it will not effect a cure. Then I could mention other cases. A gentleman whom I have seen now for two years, who until lately has taken scarcely any remedies, but has carried out the dietetic treatment very faithfully, presents urine which gives no evidence of sugar whatever. He retains his strength mentally and physically; he is a man of great activity, being engaged in business involving large responsibility, able to go on with it, and finding the dietetic treatment perfectly satisfactory—finding no hardship.

Now, as to medicines, as I have said, a great number have been proposed from time to time, have been tried a short time, and then have passed out of use, others taking their place. This patient is not under my own care here. He is under treatment with the sulphide of calcium, a fifth of a grain three times a day, together with the dietetic treatment, so far as it can be carried out. With regard to this sulphide of calcium, one patient—a medical man in this vicinity who suffered from this disease—consulted me about three years ago, at which time he found that he had diabetes, adopted the dietetic treatment, relinquished his duties in town, which were exceedingly laborious, and went into the country, and his urine after a time showed no evidence of sugar. When I saw him last, which was a few months ago, I never saw him look better, and he said to me that he had never felt better in his life. And by the way, as an evidence that this disease may have existed some time before the patient's attention has been directed to any disease, this has been said to me over and over again by patients, even when the urine still contained sugar. They were not aware that they had any disease, as they felt much better than they had for months, perhaps for years before. They would not be aware that they had any disease were it not for a chemical examination of the urine. If they could put that out of view they would not have the consciousness of having any disease at all. This gentleman, who was a very able practitioner, was led to use the remedy that I have just mentioned from finding it recommended, as he told me, in some medical journal. He has the impression that the sulphide of calcium had considerable to do with his apparent cure. Well, I am free to say that when I talked with him about it my own belief was that he was apparently cured by the dietetic treatment, and by

a change of habits of life, the avoidance perhaps of some excesses.

To one patient who came to see me I stated these facts with regard to that remedy, and I said, "If you feel no objection I will prescribe it for you." This was a case in which the dietetic treatment had been extremely successful, and most of the time there was very little, if any, sugar in the urine. I told the patient that the remedy in question would do no harm; that I thought I could say that. He said, "Well, let us try it." I put him upon the remedy, beginning with small doses, and increasing them. I began in his case with an eighth of a grain, but I think we might begin with a quarter of a grain; in other cases I have begun with a quarter of a grain three times a day, after a fortnight doubling it, going up to two grains, and continuing it indefinitely. Well this patient went on in that way, and he is very much impressed with the idea that it has been of use to him. Now we must make some degree of allowance with regard to the opinion of the patient as to the effect of the remedy. I do not mean to say that the remedy has not been of value, but I do not feel as certain as the patient does with respect to its value. I am also prescribing the same remedy in three or four other cases, but the period during which it has been used is too short, I think, to enable one to form a correct judgment with regard to it. I shall certainly continue the use of the remedy, for it can do no harm; and, moreover, it is a gratifying thing to the patient to be taking a remedy which he supposes may be of use. The moral effect of remedies, as people's views are now, is by no means inconsiderable, it is a factor which we cannot altogether ignore in the treatment of disease.

This disease I believe may be kept in abeyance indefinitely by appropriate dietetic treatment, and yet I am extremely doubtful whether a patient can ever properly consider that there is a permanent recovery.—*American Practitioner.*

COMFORT FOR THE SLEEPLESS.

Very many of those whose attention is called to the title of this paper will exclaim, "How can there be any *comfort* for the worn, jaded, hopeless invalid who is suffering from persistent insomnia?" It is the design of this article to show what methods of treatment and mental discipline have been found most effective in ameliorating the evil, and, consequently, in affording comfort to the suffering ones. The number of those of both sexes and all ages and all pursuits in life who are troubled with insomnia is very great, and the number is supposed to be increasing rather than diminishing. It has been regarded by some writers as comparatively a new affection, and due in a great measure to effeminacy in habits of life and modes of living. We do not attach much importance to this view, for the very good reason that there is no substantial

basis of facts for it to rest upon. So long ago as we can remember,—and the space of time over which our memory extends is more than half a century,—the number of the nervous and the sleepless, compared with that of people then existing, was as great as now, and the increase is the result of increased population. The truth is the make-up of people who stood to us in the relationship of grandfathers and grandmothers, or great-grandfathers and great-grandmothers, was about the same as now, and the same idiosyncrasies of organization existed among them as exist among us. They dosed for nervous pains and restlessness as we do; but the nature of their remedies was very different. Instead of morphine, the bromides, chloral, etc., they took to onion syrup, lettuce juice, assafoetida and a decoction of valerian roots, and in the list we must not forget to place that famous "leathean head-support," the hop pillow. Instances of weak or disordered nerves were observed among the Indian tribes in the early settlement of the country; and among all nations, civilized and savage, there are physical organizations not favorable for quiet and repose under abnormal conditions, or change of circumstances.

Nature for the best of reasons, doubtless, has given to some good digestion, a sound muscular system, and an arrangement of nerves which is insensible to outward or inward influences. The men and women who can say in truth that they never have known they had a stomach or a nervous system from any physical pains, are looked upon with envy by the dyspeptic and nervous. This feeling is unavoidable, a natural result of contrast between persistent misery and a supposed exemption on the part of those whom they see around them. But we must remember that the law of compensation holds good in every movement in nature, in every phase of life. The unemotional do not, in many instances, rise much higher in the scale of being than the animals,—not, in fact, as high as in the case of some animals. The animals, both savage and domestic, eat, drink, and die; and what more can be said of men and women who all their lives eat, sleep, and lounge about, like pigs or oxen in the fattening stalls of the farmers? If rich, they enjoy a good dinner, a nap afterwards, a ride in an easy carriage, a few friends without culture like themselves; but the beautiful things in nature and art, like flowers, landscapes, mountains, cascades, paintings, statuary, music, oratory, books,—these are not according to their tastes, and are ignored. The sufferers from sensitive nerves, intense emotion, insomnia, etc., are usually of an organization susceptible to the influence of the beautiful, lovers of everything that is refined, and they enter into keen enjoyment of whatever is wonderful or elevating in nature and art. Shut out as they are from the animal pleasures of the world, the higher joys of a purer sense afford keen delights when pain and suffering are absent from the body. Is there not comfort in these

considerations? Everything that is good and holy in this world comes through suffering, and where there is much of this there are open to sufferers sources of bliss of which the healthful, stolid, animal human world can know nothing whatever. But let us turn to sources of comfort of another kind, namely, hygienic and remedial measures, adapted to remove in a degree the intensity of suffering, and thus confer seasons of happiness upon the sleepless. Insomnia arises from a variety of causes; largely, however, from inherited weakness of organization, from habit, from bad practices in both sexes, from too much worry or attention to study, from too much business and business care, from local physical troubles, and from many other less prominent causes.

Having been a sufferer from insomnia for more than thirty years, we have naturally had our attention turned to its study, and have given it much thought and observation. In our case it arises from inheritance in a large degree; or rather from the effects of incessant mental labor upon an inherited feeble constitution. We have sounded to the bottom all the depths of misery attendant upon sleeplessness, and our sympathy for this class of sufferers is very great. Notwithstanding the suffering life has not been devoid of comforts and pleasures; and to know how to extract good out of evil, or how to rise superior to physical pain, is knowledge of a desirable kind.

Insomnia is not troublesome alone to the weak and nervous. Some of the worst instances that have come under our notice have been the case of men of strong, wiry constitutions,—men who have done their full share of the world's work and reached to good old age. Habit has much to do in originating the evil in such instances. Any man who goes to bed with his business on his mind, or with some kind of worry, great or small as it may be, is in the way of acquiring habits of wakefulness. The habit once established, like the appetite for drink, or tobacco, or rich foods, clings tenaciously to one, and it is recognized with alarm that the evil has come to stay. Men and women not of excitable temperaments become sleepless from over labor, mental or physical, or from both combined. Such cases yield readily to proper diet and rest. Often, persons who all their lives have uniformly slept well are suddenly, and without known cause, attacked with insomnia. One night goes by without sleep, still another, and perhaps another, and then comes a state of mental fear and unrest which is deplorable. The patient is frightened; it is a new experience; there is fear that sleep will never come again; and, to the disordered imagination, insanity is imminent, the asylum looms in the distance, every sense is abnormal; wild fright usurps the place of reason. We have had such cases brought to us for advice, and satisfaction experienced in the being able to dispel fear and remove the abnormal conditions has been very great. In one instance a gentleman came from a long distance in a deplorable condition of mind.

He was soothed and quieted with the assurance that his case was by no means unusual, that he would sleep again, that he need have no apprehensions, etc. This man took his carriage for his return, and slept soundly the whole distance. In such cases there is much alarm among the attendants or family, and this adds to the excitement of the patient. Prompt advice is necessary here before a habit of wakefulness is established. Lawyers, after an excited week in court; clergy men, from the excessive labors of Sunday; literary men, at the close of work upon a book or essay, are apt to pass sleepless nights, and this abnormal condition must receive immediate attention: a temporary change of thought and labor is demanded, so that the distended blood-vessels of the brain may retract to their normal state. Inattention may result in laying the foundation of a miserable life; and this is true in the case of the strongest physical constitutions.

In instances of sleeplessness, fear and distrust are usually the most prominent and distressing symptoms. The ever-present feeling is that sleep has departed, never to return; and this is the disturbing emotion even in those who have had repeated attacks of the evil. Nothing is gained from experience: loss of sleep for two or three consecutive nights renders everything within and without abnormal; past deliverances are forgotten; hope departs, and gloom usurps its place. At this juncture the kind assurances of friends, the little attentions and soothing words of a sensible husband, wife, sister or brother, fall like the holy ministrations of angels upon the disturbed spirit of the sufferer, and afford comfort which is unattainable from other sources. As a remedial agent nothing seems to be more appropriate and effective in such cases than the bromide of sodium combined with bromide of ammonium. We have found twenty-five grains of the former mixed with ten of the latter, dissolved in a large wineglass of water, to which has been added ten drops of fluid extract of ginger, a most excellent remedy. It should be made ready early in the afternoon, and taken in three or four doses at regular intervals until bed-time. We much prefer the sodium bromide to the potassium; and the ammonium is to jaded dyspeptic stomachs a tonic as well as a soporific.

In all cases of sleeplessness from worry or where this tendency is constitutional, hydrate of chloral is the royal remedy. We regard this agent as the most wonderful in its specific influence and adaptations of any known to medical science. Its discovery is among the most important ever made in chemistry, and the name of Liebreich, the discoverer, cannot fail to be remembered through all the ages. Look at some of its remarkable characteristics: (1) it rarely fails to produce quiet, refreshing sleep; (2) it seldom disturbs the stomach; (3) it increases the appetite; (4) it does not disturb the bowels; (5) it does not lose its power by continued use, and the dose does not need to be increased. The prejudice against its proper

employment is not based on knowledge of its remedial or chemical nature. Like all good things it is liable in ignorant hands to cause some degree of mischief, but less than most other powerful agents. It is not a remedy to be placed in the hands of patients for indiscriminate employment, and the same may be said of all medicines. To the sleepless, chloral is a boon of the greatest magnitude, but the *habit* of taking it must be guarded against. If one is troubled with persistent insomnia, it is important to secure a good night's rest as often as once each week, and the chloral may be taken once or twice a week without the slightest danger, unless there are some very unusual complications. Of course it should be taken only under the supervision of an intelligent physician.

Sleeplessness is not often a fatal affection. Hundreds and thousands are tossing upon their beds sleepless, discouraged, weary, in all parts of the world, every night, and most of the sufferers live through the usual number of years allotted to man. We have counted the shingles upon the roofs of imaginary dwellings, and numerous flocks of sheep as they jumped, one by one, over an imaginary wall in a pasture, through hundreds of weary nights, but sleep has not yet taken its final departure, and probably will not until the physical house we live in is entirely vacated. Let no sleepless person be discouraged. Maintain hope under all circumstances. Remember that there are many worse cases of suffering than your own in the world, although to you it seems impossible. Keep up your general health by all sanitary means possible; walk much in the open air, if you can walk; ride, if you cannot walk. Above all measures, keep the functions of the skin in prime condition; cleanliness is antagonistic to sleeplessness. Dry friction over the body by the use of the hand, or, better, by the use of the French hair mitten, twice a day, we have found of great service. The air bath should not be neglected. A few minutes after the employment of friction over the body, walk about without clothing in a cool room, and if possible let the sun strike upon the body. Do not remain uncovered too long, so as to become chilled. Keep the digestion good; eat only such forms of food as suit the digestive organs. Surround yourself with cheerful company if possible, read such books as do not tax or weary the mind, and life will cease to be burden, even if you do not sleep as others do. Avoid above all things constant dosing; throw into the ditch, or into the sea, all nostrums that may fall into your hands. A little of the bromides or chloral may be needful at times, but use them only as directed by physicians.—*Boston Journal of Chemistry.*

EXAMINATION OF CHILDREN.

By W. T. PLANT, M.D., Prof. Diseases of Children, etc.,
Syracuse University, N. Y.

For the proper examination of sick children both time and tact are necessary. The work cannot be forwarded by haste and impatience. It is important, at the onset, to win the confidence and good-will of the little one. This is easy to those who love children; difficult often to those who dislike them. But love grows by the using, and he who will cultivate their society and interest himself in their affairs, will come to have a genuine interest in them. If the patient is a stranger and old enough to be observing, be careful how you approach it. "First impressions are lasting." Avoid brusqueness. Better at first talk about the child than to it. Get the history of the sickness from the mother, and while receiving that, you may notice the child without seeming to. A trained observer can see a good deal in a short time. The glance will show whether the child is very ill, and may even indicate the probable character of the ailment. Notice the physiognomy first. The features of a child under three or four months have little expression, but beyond this period they may be taken as an honest declaration of its feelings. It has not yet learned the art of hiding trouble under a tranquil mien. In acute diseases attended with fever the cheeks, and perhaps other parts of the face, are flushed from congestion. If the redness is circumscribed and transient, appearing on one or both cheeks, the forehead or the ears soon fading into paleness, to reappear after an uncertain time, we have in this a reliable sign of serious brain trouble. Drooping of the upper lids, squinting, rolling of the eye-balls, fluctuating or unequal pupils, or a steady gaze on vacancy, associated with fever, are symptoms that point in the same direction. A small, pinched face, overtopped by an enormously enlarged head, characterizes hydrocephalus. Rapid out and in movements of the *alæ nasi*, with flushed and anxious countenance, attend severe inflammations of the respiratory organs. I know of no disease that will change the physiognomy of a little child so quickly as a diarrhoea, with copious watery dejections. I suppose that full three-fourths of the weight of a child's body is water; and its rapid abstraction by an intestinal flux may, in a few hours, work such changes in a plump and ruddy face that it is scarcely recognizable.

Notice also the voice. You know the clear, ringing, exuberant tones of healthy childhood. In sickness they are changed. Diseases that produce great debility render the voice weak and plaintive. In pneumonitis and peritonitis it is restrained, because its exercise causes pain. Fits of loud crying are evidence of the absence of these diseases. In croup, and other affections of the larynx, the voice is apt to be hoarse and brassy. Hoarseness is also an early sign of congenital syphilis. Some cases of cerebral inflammation are attended by an occasional solitary, piercing cry—a cry so peculiarly

expressive of agony that it is not easily forgotten. This is the "hydrocephalic cry" of the old authors. Sighing is a symptom frequently seen in like cases.

Cough is very frequent in children, and its character varies with the cause. After taking cold, the most frequent cause, the cough is dry at first from diminution, but becomes moist at length, from an increase of bronchial secretion. The cough of pneumonitis and pleuritis is apt to be restrained. That of whooping-cough is always paroxysmal after the first stage, though the whoop is not always present. The cough that accompanies some forms of heart disease is dry, stuffy, and frequent. A laryngeal cough is peculiarly loud and resonant—clarion like. Stomach and intestinal irritations, as from worms or undigested food, also cerebral and spinal irritations, often give rise to a persistent, dry cough, from reflex nervous influence. Lastly, continued fevers in children are often attended throughout their course by a hacking cough, difficult to subdue, and more annoying than dangerous.

Notice, again, the position and movements of the patient. If very weak, it lies upon its back without much movement of its limbs. If the head is retracted and cannot be brought forward without pain, if the body is rigid, and there are muscular spasms and twitchings, this condition points strongly towards cerebro-spinal irritation or inflammation. If any of the abdominal viscera are inflamed, the child prefers to lie on its back with the limbs drawn up. In colic the prone position is chosen because pressure gives relief. Children often carry the hand to the seat of pain—to the forehead in headache, to the ear in earache, to the gums when teeth are coming. Rubbing the nose and upper lip is popularly regarded as a sign of worms. It may be due to these, or to any other irritant in alimentary track, to a cold, or a dose of Dover's powders or other opiate. In spinal and hip diseases, children instinctively assume positions so characteristic that they are of great diagnostic value. In all conditions of the respiratory organs, in which the need of air is urgently felt, there is apt to be extreme restlessness.

Inspection of the surface of the body will frequently lead to a correct diagnosis without other examination. All the exanthemata may be known in this way. Congenital syphilis is wont to betray itself by coppery discolorations of the surface and eruptions around the anus. In infants the first stage of intermittent fever is seldom attended with shaking, as in older people, but by lividity and paleness of the skin and a characteristic goose-flesh appearance. Jaundice, a frequent ailment in the newly born, imparts a yellowish tinge to the surface.

In grown people we make much of the pulse; not so with children. It is usually absent at the wrist for a week or ten days after birth, and throughout infancy it is feeble and very rapid. Its average during the first year is about one hundred and thirty (130). It is considerably slower during sleep, and much faster during active movement. Gradually it becomes less rapid, and at the fifth year it

is about ninety. During the whole of child life it remains somewhat faster than in the mature. At puberty it is about eighty. The infant pulse is liable to great acceleration from slight causes. A cold, the coming of a tooth, or any transient emotion of joy or grief, may affect its rate as much as a serious illness. You will naturally infer that a rapid pulse is of little significance in very early life. A preternaturally slow pulse is of more importance, being one of the ordinary accompaniments of serious brain disease. The difficulty of counting the pulse, owing to the incessant movement of children, still farther detracts from its value.

The thermometer, an instrument of the greatest value in our work among grown people, is comparatively of little worth when we are dealing with young children. Often the child is refractory and must be held down in order to keep the instrument in the axilla long enough to take the temperature. This is of the less consequence, since its revelations are of much less value than in adults. For, in children, the temperature, like the pulse, is liable to sudden increase from slight and transient causes. A fit of indigestion, or even an outburst of anger with hard crying, will cause the temperature to mount to 103° or 104° , and the case might seem to wear a serious aspect; but an emetic or a dose of oil for the indigestion, and such wholesome correction in the other case as shall restore the calmness of an obedient spirit, will soon bring the body heat down to the normal standard. When the thermometer is used, it should be remembered that the temperature of the young child is a little higher than that of mature age, though the difference is but the fraction of a degree.

The respiration in young children differs in some particulars from that of mature age. In the very young infant, the breathing is frequently intermittent and irregular. There may even be pauses of such considerable length between the inspirations that the mother fears the cessation of the function. From an average of about forty respirations per minute, during infancy, the rate decreases as the child grows older. At the tenth year the average is about twenty-two. Like the pulse, the breathing is liable to great disturbance from slightest cause. Exercise, emotional excitement, or a transient fever, may increase it as much as more serious ailments. In capillary bronchitis and pneumonitis, the respiration is quickened. In acute pleurisy, and in peritonitis, it is short and difficult from the increase of pain to which the movement gives rise. In all acute febrile affections in the young child respiration is apt to be rapid and panting. This, with the cough to which I have before alluded, often renders parents apprehensive of lung disease. In acute encephalic inflammations the respiration as well as the pulse may be abnormally slow and intermittent. In obstructive disease of the larynx and trachea, as croup, inspiration is prolonged, and, if the obstruction is considerable, is accompanied by a peculiar wheezing sound.

In affections of the chest in infants, you will have

frequent occasion to resort to auscultation and percussion; and you will be more fortunate than I have been, if, owing to the uneasiness of the child, to the small size of the chest, and to the faintness of the respiratory murmur, you do not fail of that diagnostic precision which is so easy of attainment in the adult. Some things, however, may be learned by these means from the youngest and most refractory patient. We may always know by auscultation whether the lungs are freely and equally pervious to air, and by percussion whether there is any considerable dullness in any part of the chest. If a stethoscope can be used without frightening the child, it is preferable to immediate auscultation, because with it the sounds are collected from a restricted area, while adventitious noises from the nares, the larynx and the stomach are excluded. It is my habit to begin this examination at the back to avoid frightening the child. The young auscultator should have a care not to mistake the naturally harsh breathing of youth for a condition of disease.

While you have been bringing the examination to this point, some chance opportunity of inspecting the tongue and inner side of the mouth has probably presented itself. If not, this part of the investigation had better be made last, since it is pretty likely to provoke crying and a lusty resistance, which, occurring earlier, would interfere with and retard your work. To examine these organs the patient should be brought in front of a good light. While the nurse holds it and controls its hands, the mouth may be opened by pressing the chin downward. The tongue being in view, notice the condition of its upper surface. If coated, observe the color and depth of the fur, and whether there is any undue prominence of the lingual papillæ. In infants, examine the inner side of the mouth for aphthous sores; also if at an age when teeth may be coming, pass the index finger backwards over the gums and ascertain their state as to heat and turgescence. If there is ground for the least suspicion of throat trouble, do not neglect to make an examination. This is easily accomplished by steadying the head and passing the handle of a teaspoon over the dorsum of the tongue nearly as far backwards as the circumvallate papillæ, and making downward pressure.—*Obstetric Gazette.*

ELIXIR OF SALICYLIC ACID.

Dr. Wolff furnishes the following formula: Dissolve salicylic acid, 3 i, in alcohol, f 3 vi, and add simple elixir (or elixir curacao), q. s. f 3 vi. The dose is a tablespoonful, containing 5 grains of salicylic acid, the taste of which is well masked. The elixir should not be given with water. The additional amount of alcohol in this preparation is not contraindicated, but seems to overcome the tendency of the salicylic acid to act as a cardiac depressor. In variola this elixir has been used with good results.

CARBUNCLE—ITS TREATMENT.

By J. B. RICHARDSON, M.D.

"Early impressions are the most lasting" applies as forcibly to instructions in surgery as to any department of acquired knowledge. The treatment (local) of anthrax in my student-days was that of free (crucial) incisions as early as the correct diagnosis could be made, "the knife being passed freely through the tissues to the base of the inflammatory effusion, the object of which is to give room for the slough to separate and come away;" then poultice, and at the earliest moment dissect away all the slough as it formed. With such emphasis was this "crucial-incision treatment" dwelt upon by all teachers of this department of our art that it required a degree of temerity on the part of any one to deviate from this injunction.

Free incisions at times of necessity implied the useless infringement upon or passage through by your knife of tissues which were never to become involved in the destructive or breaking-down process; whose circulation and nerve-supply, as well as that of contiguous parts, were seriously jeopardized by this practice; also a loss of blood, which could not well be spared by some of the "run-down" patients.

This treatment, I have reason to believe, still generally prevails. The "caustic" treatment has some adherents, among the number an excellent and late writer, Mr. Bryant.

For several years past I have greatly departed from my early instructions upon this point; and, as I believe, not only thereby rendering the treatment less painful, but shortening the duration of the existence of the affection, and in addition saving tissues which under the old method would inevitably be destroyed.

Sidney Ringer (*Handbook of Therapeutics*) asserts, "Belladonna applied over abscesses and carbuncles reduces inflammation and allays pain." He advises its employment in any stage of inflammation, as "it will often arrest the progress of an abscess otherwise almost certain to mature." Even when it fails to prevent suppuration "it will reduce inflammation, subdue much of the pain, and greatly limit the inevitable abscess."

As regards the use of poultices in these cases, my experience will not allow me to endorse their employment; for I am convinced they not only cause the formation of boils around the seat of the carbuncle, but produce an extension of the destruction of both integument and underlying tissues. I therefore never employ them.

When first seen, and recognized to be a carbuncle in its formative stage, make a small opening with a sharp-pointed bistoury in the center of the swollen and inflamed structures just large enough to allow the easy introduction of the nozzle of a hypodermic syringe, which has been previously charged with a fifty-per-cent. solution of carbolic acid in oil or water, and after passing it a short distance into the central-forming slough, press the piston suffi-

ciently to expel a drop or two of the contents of the syringe; retract and deflect the point of the syringe as you reintroduce, and repeat this until you have insinuated the solution into a considerable area of the interior of the commencing carbuncle. This done, with gentleness and patience rub into the overlying skin, upon and for a considerable distance around the forming anthrax, equal parts of extract belladonna and glycerin (Price's), finally applying a piece of lint well smeared with the same solution to the parts, strapping it in its proper place with gum-plaster, and over all this dressing a well-worn, soft silk handkerchief (folded). This external dressing should be repeated twice or oftener daily, with the double object of cleanliness and to get the supplying vessels impressed physiologically by the belladonna externally applied. As soon as the point of destruction of the integument is sufficiently large—or you are able to enlarge it by use of scissors or forceps and not cause great pain or hemorrhage—a piece of lint saturated in a fifty-per-cent. carbolic-oil solution should be gently but firmly introduced into the opening, and, by spreading it out, be made to come in contact with the bottom of the inner surface of the carbuncle. This application causes at first some pain, but it will be short-lived, the patient soon appreciating the anesthetic effect of the carbolic acid. Upon the first piece of lint place a second piece (dry), and cover all with a third larger piece (three inches square), the inner surface of which has had a good coating of the belladonna-and-glycerin solution applied to it, securing the last with strips of plaster as before mentioned. At each succeeding dressing, as slough forms or breaks down into pus, remove carefully with forceps and scissors as much as you can, causing no bleeding, and as you approach the healthier parts beneath lessen the strength of carbolicized oil or watery solution of acid you employ until you dilute to five grains to the ounce; finally discarding altogether the acid solution, substitute for it either lukewarm water as a dressing, or, if indicated, a weak astringent solution. The carbolic acid has the effect of stimulating the circulation of the parts involved in the diseased action with which it is brought in contact, thus enabling them to repel this tendency to slough. It acts as a local anesthetic, together with the external application of the belladonna, removes to a great extent the usual necessity for the internal administration of sedatives to obtain sleep, and lessen pain. The glycerin and oil exclude the atmospheric air, thereby partly removing one necessary factor to the production of decomposition. The antiseptic and antiputrefactive quality of the acid reduces the danger of pyemic symptoms as a resulting complication to a minimum.

I would have no trouble in citing several cases which started out to all appearances for a six or eight weeks tour. Under the above mode of treatment, patiently carried out, sloughing and suppuration ceased, and healthy granulation began in from eight to twelve days.

As regards systemic treatment, if any of the functions are slothful, re-establish them. From the beginning give from one-twentieth to one-tenth-grain doses of calcium sulphide, as advised by Ringer, continuing its use until healthy action takes place in the local trouble, and follow this when the symptoms of fever disappear with full doses of tinct. ferri. chlorid, *ter diem*. I can from experience indorse the assertion of Ringer, "In carbuncles the sulphides will generally be found serviceable, melting, as it were, the core into healthy pus, and so quickly expelling the dead and otherwise slow separating tissue." They also break up the tendency to formation of boils or abscesses (cervical and others) in children of a scrofulous habit.—*Louisville Med. Journal*.

CASE OF CROUP TREATED BY PASSING CATHETERS INTO THE TRACHEA BY THE MOUTH.

By J. WILSON PATON, M.D., M.R.C.S. (*British Medical Journal*)

In the *British Med. Journal* for July 24 and 31, 1880, are two papers by Dr. Macewen, on the Value of Tracheal Tubes introduced by the Mouth in Edema Glottidis, etc. The cases he records are all in adults. I am not aware that this treatment has been used in children, but its simplicity and advantages are so great that a few notes of a case of croup in which catheters were used may be interesting.

H. J., aged three years and ten months, had measles, the rash appearing on February 15, 1881. On the disappearance of the rash a hard cough supervened, which gradually increased in severity until March 1st. On that date I found him, at 1.30 a.m., suffering from intense dyspnea, quite unable to speak, and his lips of a dark livid color. His cough was constant, brassy, and without expectoration. The respirations were 35 per minute, the cartilages of the ribs and sternum being drawn in at every effort to breathe, and crepitation existing over both lungs. The fauces were healthy. The pulse was 144, very weak. Having a No. 11 prostatic catheter with me, I determined to pass it into the trachea, instead of performing tracheotomy. Watching an opportunity, while the tongue was depressed with a spoon, the catheter, curved a little more than usual, was passed into the trachea during an attempted inspiration and without the slightest difficulty. A severe struggle followed, lasting perhaps a minute or two, the face becoming purple and the eyes staring with fully dilated pupils. The paroxysmal efforts to expel the tube being unsuccessful, a pretty full inspiration, partly through the tube and partly through the larynx, followed; about two ounces of frothy, bloody and purulent mucus were ejected by the tube and the mouth, the livid color disappeared, and he lay down, breathing easily through the tube. The presence of the tube did not prevent his

swallowing milk, though sometimes a little of this was ejected from it during a cough. The tube was retained *in situ* by a strip of plaster, and the teeth were prevented from closing on it by means of a pear-shaped piece of hard wood.

Six hours afterward he was much easier, and could say "Yes" and "No" distinctly. The cough continued at intervals of ten minutes, and did not seem altered in character by the presence of the tube. Crepitation still existed over both lungs, an abundant muco-purulent secretion passing both by the tube and the mouth. Hitherto he had been kept in a warm room, but now a bronchitis-kettle maintained a moist temperature of 70° F. The tube was removed without any inconvenience after it had been in the trachea for eleven hours, as he had bitten it, and no air was passing through it. Shortly after its removal symptoms of obstruction gradually reappeared. During the same evening another ordinary gum-elastic catheter No. 12 was introduced, a slight momentary struggle and cough supervening. The presence of the tube led again to a very free expectoration of mucus. In the course of a few hours the respirations and pulse became lower, and crepitation and dyspnea ceased. When the tube had been in for forty-eight hours and a half it was removed and not again introduced. On March 8th the voice and chest sounds were normal, and he was not seen after the 10th.

This case was a severe one, and would have soon ended fatally had no operation been performed. Tracheotomy seemed inadmissible, neither the case nor the surroundings being favorable for it. *Primâ facie*, it would be expected that the introduction of a tube into the trachea of a child against its will would not be so easy as in a consenting adult. That may be so; but it is certain that the operation is extremely easy and simple, and does not take more than two or three seconds from touching the tongue with the spoon till the tube is in the trachea. Had tracheotomy been performed successfully, when would the child have been out of danger? Certainly not so soon as here recorded; for at the end of the third day the child was so well as to be able to breathe freely without the tube, and was quite well before the tenth day after the operation.

USE OF PESSARIES.

The Section on Obstetrics and Diseases of Women (A.M.A.) received some very practical and useful directions relative to the use of pessaries, by Dr. Paul F. Mundé, of New York. (Condensed from *Virginia Med. Monthly*):

Be sure to diagnose the nature and degree of displacement before using a pessary.

Replace the uterus. It is well to do this repeatedly, every day or twice daily, for several days before using the pessary. The objects for so doing are two: To distend and toughen the vaginal pouch (which may be done by means of a cotton

tampon), and to relax the over-stretched uterine ligaments.

Never insert a pessary if there be acute or recent inflammation of the uterus or adnexa; or when pressure on the part where the pessary is to rest gives decided pain.

When the uterus is not replaceable because of adhesions which bind the fundus down, use great caution and discrimination in deciding whether the fundus is to be elevated by manual and instrumental means or gradually by use of a pessary (this applies only to retro- and latero-versions). If neither is advisable, try to induce resolution of the adhesions by local, alterative, and absorbent measures before using the pessary.

Choose an indestructible instrument. This does not apply to prolapsus uteri.

No two vaginæ are exactly alike. Choose a pessary for, and adjust it to, each particular case.

If the vaginal pouch is too shallow to receive a pessary, deepen it by daily tamponing with cotton or by the upward pressure of a Cutter or Thomas vagino-abdominal supporter previous to using the pessary.

Never leave a pessary in the vagina which puts the walls to a stretch, and which does not permit the finger to pass between it and the wall of vagina (does not apply to prolapsus uteri).

A pessary which projects from the vulva is displaced.

A well-fitting pessary is a source of comfort and gives no pain. Giving pain, it should be at once removed.

Always examine a patient on her feet after introducing a pessary to ascertain if it be competent to sustain the uterus during walking, etc.

Always tell a patient that she has a pessary in her vagina when you have put one there, or she may, unconscious of its presence, allow it to remain for years to her ultimate discomfort and danger. Always tell the patient to return within a week after the first introduction that the position and working of the pessary may be looked after. After this let her return every four to eight weeks, or the instrument, if not looked to, may cause ulceration. The patient will have to wear the pessary for months or perhaps years before recovery can be expected. Never introduce a pessary which the patient cannot herself remove, and tell her to remove it whenever it causes pain and present herself at once for examination.

Vaginal injections daily should be used for cleansing purposes; if the discharge be profuse, add astringents; if sanious or purulent, let her come to you at once, as the instrument has probably caused ulceration.

On removing the instrument let the patient test the result of its use. It will take several days, or weeks, to determine the benefit obtained.

Relieve downward pressure by a proper support of the skirts; and in anterior displacements aid the internal supporter by a supra-pubic pad.

All pessaries may be introduced in the knee-

chest position when it is desirable or possible to replace the uterus only in that position.

A Simms speculum elevates the perineum, air enters and expands the vagina, the pessary is introduced by touch and sight, and the patient laid over on her left side.

For aggravated retroversion and prolapsus of ovaries or uterus this has many advantages over the left semiprone decubitus. It must be remembered, however, that here the position of the patient is reversed, and that the pessary must be introduced accordingly.

NERVE-STRETCHING FOR LOCOMOTOR ATAXY.

Dr. Charlton Bastian has recently delivered a clinical lecture, at University College, on a marked case of locomotor ataxy, the symptoms of which he described very minutely. The patient was about forty years old, there was wasting of the muscles of the extremities, especially in the left leg and thigh; at length the movements of his legs became slow and jerky, after walking a few yards he would become exhausted and his legs would double up under him. Mr. Marshall cut down on the great sciatic nerve on the middle third of the right thigh and stretched it with his finger, pulling it twice upwards from below, thence twice downwards from above; antiseptic precautions were employed. About five weeks later, the right lower limb having markedly improved, whilst the left remained as it was before the right sciatic nerve had been stretched, Mr. Marshall operated on the left sciatic in the same manner. Troublesome diarrhoea followed, but seven weeks later, when the patient tried to walk, his gait was found to be much better, and tactile sensibility, previously impaired in the lower extremities, had become perfect. The first operation was followed, in seven days, by the disappearance of a constant aching pain in the hypogastrium, which did not return, though slight pain was felt in the lower part of the chest. In a less advanced case treated in the same manner the improvement was but slight. The wounds, in these cases, were slow to heal. Dr. Bastian does not attempt to explain the mode in which nerve-stretching acts, but if it is found to do good, it should be practised. The manner by which many drugs act specifically on many morbid processes is quite unknown, yet that is no reason for not continuing their use when they are known to be beneficial in disease, and the same principle now applies to nerve-stretching.—*British Medical Journal*.

ABSTRACT OF A CLINICAL LECTURE ON SORE THROAT.

Delivered in University College Hospital, by CHRISTOPHER HEATH, F.R.C.S., Holme Professor of Clinical Surgery.

Tonsillitis, or acute inflammation of the tonsils, commonly results from exposure to cold, in the case of delicate young people who have susceptible throats. Towards evening the throat feels swollen and painful, and both speech and deglutition becomes difficult, the voice having a peculiar thick tone, which is very characteristic. On inspection, the fauces will be seen deeply injected, and the tonsils swollen and bulged, both towards the median line and between the anterior pillars of the fauces. There is great tenderness in the submaxillary region and behind the jaw; and occasionally acute pain in the ear from extension of inflammation along the Eustachian tube. There is considerable general fever, the temperature rising two or three degrees, and the tongue being coated with a white fur; but the pulse, though rapid, has little force, and is very compressible. In from twelve to twenty-four hours, and either with or without a rigor, matter forms in one or, seldom, both tonsils; and, if not relieved, gives rise to great distress from the embarrassment caused to the breathing, the patient sitting up in bed, and constantly hawking up viscid mucus, until at last, in some straining effort, the abscess bursts, and immediate relief with rapid convalescence follows.

In the premonitory or early stages, a mustard emetic often acts as a charm, and produces immediate resolution; but, failing this, recourse may be had to warm inhalations, the application of hot poultices below the ears, and the administration of belladonna internally in small and frequent doses, coupled with plenty of liquid food. An early puncture of an inflamed tonsil is much to be recommended, if the surgeon will use a bistoury, covered, except for a quarter of an inch from the point, and thrust it boldly through the soft palate, where it is made prominent by the tonsil. The hæmorrhage should be encouraged by gargling with hot milk and water, and will give much greater relief than the application of leeches externally. The same method should be adopted in opening an abscess in the tonsil, and thus all risk of doing damage to important structures will be avoided.

A more chronic form of tonsillitis is familiar to residents in hospitals under the name of "hospital sore throat," and is met with among persons exposed to bad air, particularly if tainted with sewer-gas. It consists in a subacute inflammation of the tonsils with injection of the fauces, sometimes going on to abscess, but more frequently subsiding, if the patient be put upon a stimulant and tonic plan of treatment, and removed from the depressing influences to which he has been exposed. The occurrence of frequent sore-throats in a household should direct immediate attention

to the condition of the drainage, and the probable escape of sewer-gases into the house.

Acute inflammation of the pharynx may occur in conjunction with tonsillitis or alone, and the great symptom is the difficulty in swallowing. The disease ends ordinarily in resolution, but may occasionally lead to suppuration in the cellular tissue behind the gullet, thus causing a post-pharyngeal abscess. The bulging forward of the posterior wall of the pharynx by an elastic swelling, which impedes deglutition and may interfere with respiration, clearly marks the case, and a puncture in the median line will readily evacuate the pus. It should not be forgotten that post-pharyngeal abscess is often connected with caries of the cervical vertebræ.

Erysipelas occasionally attacks the fauces and pharynx, and appears to lead to complete temporary paralysis of the muscles, so that not only is deglutition impossible, but it is equally impossible to excite reflex action in them by irritating the throat mechanically. The affection is a very serious one, and likely to prove rapidly fatal from depression of the vital powers, both by the poison and the want of food, unless ample nourishment be administered by the rectum until the power of swallowing is restored.

A much more chronic form of paralysis of the throat is that following diphtheria, but here it is the palate which is principally affected, the voice being thick for weeks.

Hypertrophy of the tonsils is common in children and young persons of a strumous diathesis, and, in rachitic patients, is apt to lead to the deformity known as "pigeon-breast," from interference with the full expansion of the lungs. The thick speech, open mouth, and stertorous breathing, which in sleep develops into sonorous snoring, are sufficiently marked in extreme cases; whilst, in milder cases, the constant tendency to sore-throat, and the general failure of health and strength without obvious cause, should direct attention to the tonsils. On inspection, the tonsils will be seen as large, white, glistening masses, often meeting in the middle line, and presenting yellow spots due to inspissated mucous secretion. Hypertrophied tonsils may project into and down the pharynx, but can never reach up to and obstruct the Eustachian tubes; the deafness so commonly found in these cases being due to the generally congested condition of the mucous membrane, which is relieved by the removal of the glands.

The application of local styptics in the form of a solution of nitrate of silver (gr. 10 to $\frac{3}{4}$ j), or the glycerine of tannin; the use of catechu or krameria lozenges, or the employment of a spray of sulphate of zinc (gr. 10 to $\frac{3}{4}$ j), are all useful in slight cases, by keeping the disease in check while the patient's health is improved by sea air and tonics. In severe cases, removal is the best remedy, and is much less painful and infinitely more satisfactory than drilling the tonsil with a sharp stick

of nitrate of silver or caustic potash, as has been recommended.

The simplest form of guillotine, used with a pair of vulsellum-forceps, by which the tonsils can be drawn thoroughly into the ring with the opposite hand, is preferable to the complicated guillotines fitted with a fork, which are apt to get out of order, and require considerable practice for their successful employment. The patient being seated in a good light, with the head thrown back, and the hands held by assistants, the guillotine can be slipped into the mouth, which it immediately gags; the forceps then grasping the tonsil through the ring of the guillotine, draws it well forward, and a sharp movement of the thumb drives home the blade of the guillotine, and cuts it off. Without withdrawing the guillotine, it is turned round, and the other tonsil similarly treated by changing hands, before the little patient has really time to cry. It is quite sufficient to remove a large portion of a tonsil, and any attempt to remove the whole is likely to be followed by sharp bleeding. Ordinarily, the sucking of ice for a few moments staunches all bleeding; but if not, the bleeding surface, and that only, should be painted with liquor ferri pernitratiss.

After removal of the tonsils, ice may be sucked for a few hours, and a warm poultice under the jaw gives great comfort. Care should be taken to give food cool enough to be easily swallowed, and for a few days anything hard, such as crust, should be avoided.

Hypertrophy of the uvula may be met with in the same class of patients as the hypertrophied tonsil, the whole uvula being swollen from over-development of the adenoid tissue contained in it. This must not be confounded with the œdematous uvula, due to inflammation, and commonly found in any acute inflammation of the throat. A more common form is the elongated uvula found in persons of relaxed habit, who suffer from irritable throat and constant cough, the result of the irritation of the fauces by the uvula. Astringent gargles may be usefully employed in such cases, but, if obstinate, they should be treated like the chronic hypertrophy—by abscission. This little operation may be performed with the tonsil-guillotine, or, more simply, with scissors, which must be very sharp at the edge, but blunt at the points. The uvula should be caught with a pair of hooked forceps, to prevent its being swallowed, and will be found thicker on section than might have been anticipated.

Ulceration of the tonsils of a superficial character is common in inflammatory affections of the throat, and the ulcers are often covered with aphthous patches in patients whose vitality is low. The deep excavated ulcer of the tonsils, nearly circular in shape, and covered with a thin grey slough, is symptomatic of secondary syphilis, and will only yield to constitutional treatment.

Irregular excavated ulcers presenting a yellow slough, seen upon the uvula and soft palate, or on

the posterior wall of the pharynx, are almost always due to tertiary or inherited syphilis, and will heal rapidly under the administration of iodide of potassium in full doses.

As the result of this form of ulceration, adhesions of the soft palate to the pharynx, with narrowing of the pharynx and nasal intonation, owing to the shutting off of the nose, are occasionally met with. Any interference with the cicatrices is to be avoided, as no good result is likely to follow the division of the adhesions between the palate and pharynx; but, when the cicatrization leads to narrowing of the pharynx, division and subsequent dilatation with bougies may be advantageously undertaken.

Follicular disease of the pharynx is commonly met with as an accompaniment of chronic glandular laryngitis, or *dysphonia clericorum*. The pharynx and fauces are seen to be injected and roughened, owing to the hypertrophy of the glandular structures of the mucous membrane. The patient complains of dryness of the throat, and is constantly clearing it, and hawking up small quantities of viscid mucus. The hoarseness of the voice after use for a short time is a marked feature of the disease, and depends upon a similarly congested condition of the laryngeal mucous membrane. In slight cases, much good may be done by proper elocutional instruction, and particularly by teaching the patient to use his lips and tongue rather than his throat in vocalising. The use of soft astringent lozenges (catechu or rhatany), which are to be slowly sucked at intervals, and the use of a spray with a solution of sulphate of zinc (gr. 10 to $\frac{3}{4}$ j), night and morning, will effect much good. In more confirmed cases, the application of a strong solution of nitrate of silver (gr. 30 to $\frac{3}{4}$ j) with a brush, or painting with the tincture of iodine or liquor ferri perchloridi, will be necessary, combined with attention to the general health; but the improvement is always slow, and the remedies must be varied to suit individual cases.—*Gaillard's Medical Journal*.

EARACHE.

In the course of practice, you will often be called upon to attend a case of earache. This means, pathologically speaking, acute inflammation of the membrana tympani. Now, in such a case, you may quickly subdue the inflammation, relieve the patient from the excruciating pain he is suffering, and save him, perhaps, from subsequent confirmed deafness. The treatment from which such a desirable result may be obtained is similar to that which you will find so beneficial in analogous cases of eye disease, viz., leeches behind the ear, hydrag. c. creta and belladonna powders, with warm fomentations.—*Prof. Wharton Jones, in London Lancet*.

A DRUGGIST'S MISTAKE CURES A PATIENT.

Dr. Jno. Herbert Claiborne, of Petersburg, Va., writes to *Gaillard's Medical Journal*, in regard to a case of eczema cured by an accidental prescription. He says:

"It was one of those persistent and perverse cases of eczema infantilis, which occasionally falls to the lot of the practitioner, perhaps for the purpose of testing his patience and taking down his conceit. It had been under observation for about one year, half the lifetime of the child, and afforded the most beautiful clinical illustration of eczema in all of its forms, stages, and varieties, from the freshly dripping, or rather in this instance raining vesicle, through the pus secreting impetiginous sore to the dried crusty cap, sometimes covering the whole head, shading off in numberless places, on the back or limbs, into thickened and fissured patches, involving the true skin; all at the same time, 'everything at once and nothing long,' and accompanied with an itching and burning which seemed at times almost to craze the little patient. He was a healthy, bright, well developed little blonde of good inheritance, one of quite a family of children, none of whom ever had any cutaneous disease. I had treated him for nearly twelve months, had run through all of the local and constitutional remedies that I had ever seen used, or heard of being used; when finally, one morning, my little patient was brought in decidedly worse than even he had ever been before. I hurriedly directed two prescriptions, not so much in hopes that they would do any good, as I was that the father of the boy would seek a more skillful physician.

"I did not see or hear from the little fellow for two weeks, when his father came in on this occasion without the patient and informed me, his face all over with smiles, that the little boy was *nearly well*, and that he thought that a repetition of the last prescription would entirely cure him. I could not even recall what this was, but I begged of him to get it renewed without any delay, and to use it thoroughly and persistently. 'But,' he replied, 'I cannot get it renewed. The druggist says that he put up the prescription *wrong*, and that I have been using it *wrong* all the time, and that he can't put it up any more till he sees you.' 'Has it not relieved your child?' I asked. 'Yes,' he replied, 'more than anything else that ever was done for him! I then gave him a note to the druggist to put up the same prescription which he had put up, right or wrong, and directed its use as before. In a few days the little patient was well, and his skin as smooth and as soft as velvet.

"The prescriptions which I ordered were the following: First—Ol. of cade, four drachms; sapo viridis, four drachms; alcohol, one ounce. To be applied once a day. Secondly—Unguent oxid. zinc, two ounces; ol. of cade, two drachms; to be kept on the eruption regardless of the stage or character of it, all the time. The mistake which the compounder of the prescription made was to sub-

stitute the oil of *cajeput* for the oil of *cade*. I have seen the oil of cajeput recommended for parasitic eruptive diseases, but had never known it used before in eczema. I have repeatedly used it since with the happiest results. Dr. Buckley, in a late brochure upon the subject of eczema, while endorsing highly the invaluable zinc ointment in the treatment of that disease, condoles with the doctor who has only that resource. I beg to add this accidental contribution, and by so much to enlarge such resource."

TREATMENT OF INDIGESTION AND HEARTBURN.

For the purpose of whetting the appetite, and thus acting reflexly upon the gastric secretions, we employ the class of agents known as bitters. To these we add hydrochloric acid. Ringer has pointed out how an alkali taken into the stomach before a meal, when the stomach is alkaline, produces a freer flow of acid afterwards. Consequently we comprehend the value of the well-known preparation indifferently termed, "Haust. Stomach." or "Mist. Mirabilis," or "Mist. Rhei et Gentian," in the various hospitals; a combination of world-wide fame. One drawback to this combination of rhubarb, gentian and soda is, that the student becomes familiar with it and its virtues, but remains ignorant of its exact composition, and so loses sight of it when he enters upon practice for himself. Such a mixture before meals, followed by ten drops of hydrochloric acid after the meal, will often make the difference betwixt imperfect digestion, producing discomfort, and digestion so perfect that it does not provoke consciousness. Or where there is much irritability in the stomach, *i.e.*, when a bare, red tongue imperfectly covered with epithelium suggests a like condition of the internal coat of the stomach, then bismuth is most soothing. The mixture of soda, bismuth and calumba is in use for such indigestion with good results. The dietary in such a case should consist of the blandest food, milk, with or without baked flour in it, beef tea with baked flour; nothing more till an improved condition of the tongue tells of a more normal condition of the stomach. In such case a plain opium bill at bedtime often soothes the stomach very nicely. Then there are cases where imperfect digestion is accompanied by the production of fatty acids, butyric and others, which add the phenomenon of "heartburn" to the symptoms; or there may be later products formed, which cause the bitter hot taste in the mouth on awakening in the morning or after a post-prandial nap. It is usual to treat "heartburn" by the exhibition of an alkali; but this is not good practice. In union with an alkali the offending matter is nearly as objectionable as in the form of free acid. It is much better to give a mineral acid, as the hydrochloric or phosphoric, which breaks up the feebler organic acid. By

such means we can aid the digestive act. Then at other times the indigestion is due to lithiasis, where the presence of uric acid impairs the efficiency of the gastric juice. In these cases all measures which do not entertain the casual relations of the dyspepsia are of little use. By the administration of potash in bitter infusion, well diluted, taken half an hour before a meal, this element of trouble is removed. In all cases of gouty persons suffering from dyspepsia, do not forget this cause of impairment of the gastric juice.—Dr. J. MILNER FOTHERGILL, in *Practitioner*.

THE USE OF BROMINE IN CONTRACTION OF THE LIVER.

By J. S. JEWELL, M.D., Professor of Nervous and Mental Diseases, Chicago Medical College.

For a number of years I have met with certain cases which have been, as a rule, of long duration, and in which there is chronic diarrhœa, or decided tendency towards looseness of the bowels, more or less gastric catarrh, variable dyspeptic symptoms, emaciation, at times a sallow skin, but no yellowness of the conjunctiva, gastric uneasiness, habitual scarcity or even absence of bile in the discharges from the bowels, and, finally, evident contraction of the liver as determined by careful palpation and percussion. If in these cases there is actual contraction, and it may be atrophy of the liver, it is not difficult to account for the probable portal congestion, diarrhœa, etc., observed on the very natural supposition of embarrassment in the circulation of blood from the portal system of veins. Whatever the pathological conditions may be, it is not my purpose to enquire into them at present. The clinical picture, drawn above in outline, is at times met with and easily recognized, and my present purpose is to call attention to a point in its treatment.

In quite a number of such cases I have found the persistent use of bromine, internally, to lead to marked good results. Its action is slow, and its use must be continued for months if it is to do good. My usual plan has been to give the bromine in solution and distilled water, ten drops of the liquid bromine to one ounce of water. The dose of this mixture should be five drops in water three times a day to begin with. The dose may be increased one drop a day until it is plain the stomach will not easily tolerate a larger dose. If the stomach should become irritable, as a result of the use of the remedy, it may be necessary to reduce the dose to one or two drops, or even cease its use altogether for a time, to resume when the stomach will tolerate it again. It should be given in a considerable quantity of water, as it is likely otherwise to irritate the stomach. Of course the use of the bromine does not prevent the employment of most other remedies, such as the case may require from time to time.

Under the use of bromine I have usually seen,

after a time, less disturbance in the gastric zone, less diarrhœa, a reappearance of bile in the discharges from the bowels, and a slow but general improvement in the condition of the patient. I do not think it necessary to cite cases, and am not prepared to speculate as to the *modus operandi* of the drug. This note is written, as already intimated, with the design of calling the attention of the profession to what seems to me to be a practical observation of value in the treatment of a certain class of refractory cases.—*Chicago Med. Review*.

CARBOLIC ACID IN FACIAL ERYSIPELAS.

Dr. Rothe observes (*Betz. Memorabilien*, 1880, No. 9) that, however efficacious the subcutaneous injection of carbolic acid proves in arresting the course of erysipelas, it is not suitable when the face is the part attacked, for not only does it give rise to considerable pain, but induces a swollen and painful condition of the periphery. For some years past he has been in the habit of using the following application:—Acid. carbolic., sp. vini., aa, one part, ob. terbinth two parts, tinct. iod., one part, glycerin five parts; pencilling the inflamed skin and its vicinity with it every two hours. No pain or sense of burning is produced, and the skin is usually next day pale and wrinkled. The further progress of the disease is more effectually arrested than by any other remedy, any new patches being rapidly effaced, so that in three or four days the facial erysipelas is usually at an end. The pencilled places should be covered by a very thin layer of wadding. When febrile action is present the ordinary internal measures must also be resorted to.—*Med. Times and Gaz., London, Dec., 1880.*

TREATMENT OF PYROSIS.

M. Ory (*La France Méd.*, 1880, p. 700) prescribes, in connection with milk and vegetable diet, alkaline drinks. In addition, the following medicinal formula may be employed with advantage:

℞ Pulv. rhei, gr. clx;
Sodii bicarb., gr. xxx;
Syrupi simp., f̄ss;
Aq. menth. pip. ad f̄ss viij.—M.

Sig.—Tablespoonful twice to four times daily.

M. Ory finds the following powder very useful:

℞ Magnesii calcinat.,
Pulv. sacch. alb., āā ʒj;
Bismuthi subnitrat., ʒj;
Sodii bicarbonat., ʒss.—M.

Fiat in chart. no. xl.

Sig.—One at the beginning of each meal.

Bouchardat regards the following powder as useful in pyrosis;

℞ Pulv. rhei, ʒiss;
Pulv. opii, gr. ij;
Pulv. magnesii calcinat., ʒiss.—M.

Fiat in chart. no. xv

Sig.—One before dinner.

CARBONATE OF AMMONIA IN LARGE DOSES IN THE SUFFOCATING STAGES OF PULMONARY DISEASES.

By BENJ. H. RIGGS, M.D., of Selma, Ala.

I wish to call attention to a remedy capable of rendering valuable service in a time of dire extremity—an old remedy, but one among many in this class whose merits are not fully appreciated. In this day of energetic search after new remedies, it is to be feared that the well-attested merits of the old ones may sink temporarily into undeserved obscurity. While by no means opposing any effort to improve our *materia medica*, still I may question the soundness of the policy which would desert a reliable remedy for one which may *perhaps* be better.

It has been known all the time that carbonate of ammonia had a decided stimulant and supporting action to the heart; that it enabled this organ, in asthenic conditions, to propel the blood, with increased force, through the lungs and the extremities. Still, its merits were so little known that it was generally given as a forlorn hope late in diseases, and so timed that it failed of good, and warranted the remark of an intelligent druggist, that "when the carbonate of ammonia prescription came in, he next expected to be informed of the death of the patient." This censure was more due to the misappreciation of the powers of the drug than to an inherent want of power.

Let me assure you that in the suffocative stages of bronchitis of the smaller bronchial tubes (capillary bronchitis, or suffocative catarrh of some authors), and of pneumonia, we possess no more efficient or reliable remedial agent than carbonate of ammonia, given in large doses and at short intervals. It is especially useful in these pulmonary complications of the exanthemata.

My attention was first called to the use of this agent in these disorders by Dr. J. P. Thomas, of Pembroke, Ky. His valuable suggestion has stood me well in hand on some trying occasions. Once, I remember, a fond father came to my office, barely able to articulate from distress, and asked me to go to his house immediately, as he believed his little son was dying. I had seen the infant, of six months of age, late the preceding afternoon, and had prescribed a purgative dose of castor oil to be followed by a muriate of ammonia expectorant mixture, the hot foot-bath and derivatives to the chest. Early next morning this hasty summons came, and I repaired to the house to find the child suffocating, drowning from pulmonary engorgement; his head thrown back and spinal column bent backwards like a bow to take pressure off the chest; the face pallid, with a purplish tinge to the cheeks; lips white; nostrils distended; eyes of pearly whiteness; finger-nails purple; respiration rapid and panting, and pulse quick, frequent, and feeble; temperature in the axilla, 105° . Here was a case of pulmonary congestion, resulting from

acute bronchial catarrh of the smaller bronchial tubes. The treatment adopted to relieve this child was attended with marked success; he is now hearty and well, over fourteen months after his attack. I gave him, a child six months old, two grains of ammonia carbonate, dissolved in water, every two hours, in doses of two grains every thirty minutes interval, the hot mustard foot-bath every two hours, and repeated mustard plasters to the chest. In order to give an infant of this tender age two grains of carbonate of ammonia every two hours, I have found it best to give it in this way: Send to the drug store your prescription for a solution of two grains to the drachm, and direct the attendants to put one teaspoonful of the solution in a wineglass, and add three spoonfuls of pure water thereto, and give the child one teaspoonful of this weakened solution every thirty minutes, by the watch, thus, you get the two grains every two hours.

In these distressing cases there is much satisfaction to be obtained by giving the remedy in this way. It is hardly ever necessary to give it longer than twenty-four or thirty-six hours in this way, as this stage of the disease rarely lasts longer than twenty-four hours.

In the congestive stages of acute bronchitis and pneumonia of adults the remedy acts equally well. The average dose for the adult is twenty grains dissolved in water and taken every two hours. Twenty grains to the tablespoonful of water, added to a wineglassful of water, is not an unpleasant dose. Carbonate of ammonia, in these large doses, acts as a heart stimulant, increasing the *vis a tergo*, it acts on the bowels and kidneys, and produces a flow of perspiration.

It will be observed that I do not claim that this drug will cure bronchitis or pneumonia, but that it has a well defined place in the treatment of these and allied pulmonary affections, and that the help it then gives us is effective, permanent and brilliant.

Give it in twenty-grain doses every two hours to the adult, and to the child in proportion, according to the usual rule.

There are some objections to the use of the medicine in these large doses. In many infants, even diluted as above, it produces stomatitis—the inside of the lips and cheeks become inflamed. This does not, however, supervene in less than twelve or fourteen hours, nor does it occur at all in some infants, and it soon passes away on discontinuing the remedy, which you may now safely do, and the use of some mild astringent mouth wash or powder. Again, in giving it, it will be necessary to use a silver spoon, as the common cheap spoons we meet with seem to contain an alloy of copper, which, on coming in contact with the ammonia, changes the solution to a blue color, and becomes very irritating to the stomach from the resulting raw compound of ammoniated copper (cuprum ammoniatum). Again, thirty grains is laid down as the emetic dose of carbonate of ammonia; twenty grains act thus in some adults, and in some very irritable stomachs. It produces vomiting and

persistent hiccough, in these cases, and we have to give it in smaller doses, or discontinue it altogether. In some cases it purges too freely in these large doses; the patient weakens from the constant purgation. When it has either of these disturbing effects it is best to discontinue it, and use such other medicine as your judgment dictates. It much more rarely disagrees with infants and children than with adults, and it is in this class of sufferers that it is used most satisfactorily.

Carbonate of ammonia is a very cheap drug, which is quite an item for the country practitioner who furnishes medicines to his patients and waits until fall, or waits forever, for his fee. I carry a bottle of carbonate of ammonia with me in my satchel whenever I go to the country, and when I find a case of pneumonia, I make him a solution in a goblet of the strength mentioned, tell him to take it as directed, put a turpentine plaster to his chest, and perhaps give quinine after midnight—say five grains every three hours until twenty grains are taken, and I have satisfactory success in the treatment of pulmonary diseases of an acute character.

The best way to give the drug is dissolved in water, without any syrup or other addition. It is quite common to give it combined with syrup of squills. This is an unfortunate and unscientific combination. The syrup of squills is made by the addition of sugar to the acetum scillæ, or vinegar of squills, and the free acid of this mixture makes an acetate of ammonia, or, practically, spirits of Mindererus, which is mild and efficient in the emergency, as compared with the carbonate.

I am pleased with the results of the use of this medicine in this class of cases and in this dose in my hands.

It is not only valuable in the suffocative stage of bronchitis and pneumonia, but also in asthma and pulmonary oedema, from any cause, where there are evidences of a failure of heart power where it is necessary to render this organ prompt and efficient support.

I delivered a woman in the lower walks of life of an infant. She was large, flabby and lymphatic. She was up and about the room on the third day. On the seventh day I was sent for early in the morning to see her. I did not get there, however, until about nine o'clock, A. M. I found her sitting up in bed, pallid and perspiring, coughing at every breath and attempting to speak. A vessel by the bedside contained much bloody, frothy mucus. she labored for breath. Auscultation revealed bronchial constriction and deficient vesicular murmur. Her constant cough prevented any reply to questions, and, in order to allay this at once, I gave her about one-fourth of a grain of morphine, hypodermically. I learned she had been coughing constantly for about five hours previously, or since 4 o'clock, A. M. She was asthmatic and her heart was feeble. I gave 20 grains of ammonia carbonate every two hours during that day and the first part of the night, and then followed with quinine

in full doses. Next day she was fairly convalescent, but continued the ammonia mixture for a day or two, at longer intervals, from choice. The ammonia, in her case, acted several times on the bowels, and produced a warm perspiration, both of which relieved the pulmonary distress and gave much comfort.

It will be observed that I do not advise the use of carbonate of ammonia in all stages of pneumonia and bronchitis. There are very few cases in which, in my opinion, it will not soon become necessary to resort to the turpentine emulsion, chloride of ammonia, calomel, and the usual supply of remedies in these diseases. The ammonia saves life by tiding the patient safely over the congestive stages, and then you must exert your skill according to indications. I have no faith in being able to cure pneumonia in less than eight days, and some times, especially in children, in less than twelve or four days.—*Monthly Review of Medicine and Pharmacy.*

RULES FOR INTRODUCING THE UTERINE SOUND.

Cameron gives these judicious directions in the *Glasgow Medical Journal*:—

It may seem unnecessary that he should here repeat the warning, never to pass the sound where there is any reason to suspect pregnancy, as then you incur the serious responsibility of producing abortion; but the too frequent mistake of overlooking such a condition demands the repetition of this caution. The utmost care should be taken in the introduction of this instrument, because without this you may perforate the tissue, perhaps already softened, or set up peritonitis. Malignant disease of the cervix or fundus excludes its use, as also acute inflammation of the uterus or its appendages. It has been recommended in special cases; but it is better to avoid any examination during menstruation, and in no case should the sound be passed without previously having made a careful bimanual examination.

To introduce the uterine sound, place the patient as in passing the speculum, and pass two fingers of the right hand, viz., the index and middle, up to the cervix, with the knuckles toward the pubes, and in the groove formed by the fingers glide the instrument along, keeping the concave surface directed backward. Never forget to have the sound warmed previous to its introduction. If the passage is straight, as in females who have never had children, the index finger will be sufficient to guide the sound. If the os is directed downward and forward, the instrument is passed into the cavity without rotating the handle; if the os is, however, directed downward and backward, the instrument is only allowed to enter the external os, and then the handle is turned so that the point of the sound may be directed upward and forward.

If there be any difficulty in making the instru-

ment enter, this is often overcome by slipping the point of the instrument from the finger tip into the os.

We noticed previously that the instrument usually passes into the uterine cavity for two and a half inches, as indicated by the nodule upon the convex edge of the sound. To measure the distance it has passed, place the finger point firmly upon the portion of the os, and, keeping it there, withdraw the instrument, when you can at a glance observe by the engraved figures how far the sound has passed. With sufficient care, we can usually succeed in passing the sound into the healthy womb; but the most experienced finds it often exceedingly difficult to introduce it in certain affections of this organ.

In the various flexions and versions, as also neoplasms projecting into the cavity, we find much to oppose our attempts to pass the sound. In some cases you will even fail, and it is only by the greatest patience that success may reward your efforts. Generally its introduction is free from bleeding, and if traces of blood are seen, it is usually the result of congestion, cancer, fibroids, or polypi. Force should never be used, as you will simply expose your patient to much danger. To lay down special rules were vain, for experience must guide you in each case. Every instrument should have a mark upon the flat surface of the handle, so that the operator may have no difficulty in seeing at once how the instrument is situated. In replacing the displaced organ, say in displacement backward, the movement is effected by a rotation of the handle through half a circle, so that the portion acting within the uterus may rotate in the smallest degree. A simple twisting of the handle is apt to give pain, and may cause injury. In conclusion, the uterine sound, as before stated, should never be used without previously making a careful examination. So much is this overlooked that a very eminent obstetrician proposes to have a uterine sound made, having for its handle a small representation of a foetus, which may be the means of causing the operator to pause before using the instrument.

THE "TRAINED NURSE."

That is, the woman trained to nursing as a specialty, is an anomaly (*London Lancet*). Every scrap of information she possesses beyond the mere routine service of sick-tending is not merely useless, but mischievous. It is almost sure to be brought to bear on the patient, to the injury of the case, and the disadvantage of the medical attendant. A trained nurse is a half-educated woman, who has acquired just enough knowledge to make her dangerous. The sick person is regaled with reminiscences of other "cases" attended by the trained nurse, with this or that physician or surgeon. She is the chief and prominent figure in the pictures painted for the edification of the patient and the friends. The "doctor" occupies a subordinate place, and

is changeful. Sometimes it is one and sometimes another practitioner, and the nurse does not scruple to state her preference, which is generally for the medical attendant who most defers to her judgment, and leaves the patient practically in her hands. She has no scruple in forming an "opinion" of the case, and little, if any, hesitation in expressing it. In reply to the very natural question, "What do you think, nurse?" she delivers her dictum as a skilled authority, and both patient and friends are much impressed by what she has to say on the subject. Not a few of these intruders into the sick-chamber employ their own methods and even administer their own remedies. The sick are wholly at their mercy. They are trusted and obeyed because they are "trained nurses." The medical profession is keeping up and extending this evil by recognizing the trained nurse. The policy adopted is opposed alike to the best interests of the sick and of the profession. If practitioners either lack the knowledge or the inclination to give personal and explicit directions for the "nursing" of their cases, they must at least understand that, by intrusting the duty to trained nurses, they are jeopardizing the lives or the health of the patients who confide in them, and sacrificing their proper professional influence.

TREATMENT OF INFANTILE DIARRHOEA BY CHARCOAL IN THE MILK.

For children belonging to families in easy circumstances M. J. Guerin mixes a certain quantity of Belloc's powder of charcoal with each milk meal—half a teaspoonful only at each meal. For the children of the working classes, Belloc's powder, which is a little dear, is replaced by very finely powdered, farina-like, ground bakers' charcoal. This powder mixes readily with milk, and children drink the mixture as though the milk were pure. In a very short time, sometimes on the first day, the stools change in consistence and odour, and instead of being green, become blackish-yellow. At the same time that this addition is made, M. J. Guerin dilutes the milk with one-third or one-half of sweetened water, and the children take it without repugnance or vomiting. M. Guerin has frequently seen children, exhausted by seven or eight days uncontrollable diarrhoea, regain in two or three days the expression of health.—*Lond. Med. Jour.*

A TRIUMPH OF MODERN SURGERY.

At a recent meeting of the Royal Society in London Dr. MacEwen gave a detailed account of a very remarkable case of the transplantation of bone in the human subject. It is of special interest as being the first instance in which this osseous transfer has been successfully effected. We take the following abstract of Dr. MacEwen's paper from one of our English Exchanges:—

In 1878 a child of three years was admitted

into the Glasgow Infirmary for necrosis of the right humerus, the shaft of which was already separated from its head at the epiphyseal junction. Fifteen months after the necrosed portion had been removed there had been no bone formation of any account, and over two thirds of the shaft was wanting. A first transplant of bone was then performed. In making the sulcus for the reception of the graft, reliance had to be placed on anatomical relations as to correct position, as there was no trace of periosteum or fibrous structure to indicate the former location of the bone. Portions of human bone were transplanted on three different occasions, the grafts being obtained from patients affected with anterior tibial curves, from whom wedges of bone had to be removed for the purpose of straightening their limbs. These osseous wedges were each divided into many small pieces, which were immediately placed in the sulcus in the boy's arm. The fragments united together, as well as adhered to the head of the humerus above and to the condyles below; ultimately forming a solid rod only half an inch shorter than the humerus on the opposite or left side. This transplantation of bone converted a useless arm into a thoroughly useful one. Great stress was laid by the operator upon the subdivision of the transplanted bone into fragments, as thereby greater nourishment is able to be conveyed from the surrounding flesh to the osseous formation. The conclusions arrived at are that transplanted bone is capable of living and growing, and that such transplants are capable of being put to practical uses beneficial to mankind, but that to insure success the transplantation must be conducted antiseptically.—*Boston Journal of Chemistry*, July, 1881.

"INWARD FITS" IN CHILDREN.

Dr. Charles Bell writes on this subject, in the *Edinburgh Medical Journal*, December, 1880:—

This is a common disease in infants within a few months after their birth. The child lies as if asleep, but the eyelids are partially open and have a twinkling motion, the eyes are turned up so as to show the white, the muscles of the face and lips have a tremulous movement, producing the effect as if the child were smiling—a circumstance which has given rise to the beautiful idea that angels are whispering to it, which has been finely illustrated by Moore in his *Irish Melodies*, under the name of "The Angel's Whisper." As the disease increases the breathing is occasionally interrupted, the features become pinched, and a livid circle forms around the mouth and eyes. There is restlessness and starting during sleep, and the child is disturbed by the slightest noise, and sighs and brings up wind, after which it relapses into a drowsy state. In simple and mild cases the attacks generally disappear as the child's strength improves; but if it is improperly treated, the drowsy state increases, and a sort of thrush appears, ac-

companied by feverishness, sour vomiting, watery stools, gripes, which may terminate in regular convulsions.

Dr. Armstrong has divided this disease into four stages, viz.: 1st, inward fits; 2d, fever and thrush; 3d, sour vomiting; 4th, convulsions. Underwood did not consider it worthy of being called a disease, and that he knew no complaint which ought to be called "*inward fits*;" the symptoms described above were worthy of attention only from the risk that they might pass insidiously into regular convulsions—an amply sufficient reason for their being carefully attended to and means taken for their being removed.

The incipient stage which occasioned the name may occur at very early periods, and the earlier it does so, there is the greater danger to be apprehended. Nurses often use the terms on insufficient grounds, and in consequence the mother is apt to become needlessly alarmed, and to have recourse to very improper medicines, such as Dalby's carminative, Godfrey's drops, Soot drops, etc., which are liable to produce serious results.

It has been connected with spasm of glottis, with acute asthma, the peculiar species of convulsions, cerebral croup, laryngitis stridulus, thymus, asthma, or spasmodic croup by different authors.

Treatment.—It is clear that the symptoms which have just been described are the result of something irritating the bowels, and that a dose of magnesia will in general be sufficient to remove it. Should this not be the case, it may be necessary to attend to the state of health of the nurse, and to give the child the benefit of change of air.

BERBERIS AQUIFOLIUM IN LEUCORRHEA.

Dr. A. J. Roe writes, in the *Therapeutic Gazette*

When there is simply a leucorrhœal discharge, the patient being otherwise in good health, I usually order one ounce of the fluid extract of berberis aquifolium to be added to three ounces of the syrup of tolu, and let the patient take a teaspoonful three times a day before meals. No local application of any kind need be used. The following combination has given me excellent results in all cases of leucorrhœa, amenorrhœa, dysmenorrhœa, and as a general uterine tonic and "female-regulator":

℞ Ext. berberis aquifolii fluidi,	℥ j ;	32.00 fl.Gm.;
Ext. viburni prunifolii fluidi,	℥ ss ;	16.00 "
Tinct. pulsatillæ.....	℥ j ;	4.00 "
Syr. tolu, q. s. ad.....	℥ iv ;	128.00 "

M. S. One teaspoonful three times a day, before meals, in water.

This combination will be found to give good results not only in the troubles above mentioned, but in all cases where there has been much trouble from irregularities of any kind.

THE TREATMENT OF GONORRHEA.

Mr. W. Watson Cheyne, Assistant Surgeon to King's College Hospital has carried out a series of experiments in the treatment of gonorrhea which are worthy of being extensively known. It has been demonstrated by Neisser that organisms are present in great abundance in gonorrheal pus, and Mr. Cheyne has verified the observations by inoculating cucumber infusions with some of the discharge. Acting upon the known effects of certain antiseptic materials, he decided to adopt iodoform and oil of eucalyptus. In order to bring them into certain contact with the suppurating surface, he had bougies made of these materials and cacao butter. The formula is five grains of iodoform, ten minims of oil of eucalyptus, and thirty-five grains of cacao butter. The bougie is introduced into the urethra, and a strap and pad over and around the orifice retains the bougie there until it is dissolved. After this an injection of boracic lotion (saturated aqueous solution of boracic acid) or an emulsion of eucalyptus oil (one ounce of eucalyptus oil, one ounce of gum acacia, water to forty or twenty ounces) to be used for two or three days. At the end of that time injections of sulphate of zinc, two grains to the ounce, may be begun. For a day or two the purulent discharge continues, but afterward it steadily diminishes in amount, becoming in four or five days mucous, and ceasing altogether in a week or ten days.—*British Medical Journal*.

THE CANADA MEDICAL RECORD,

Monthly Journal of Medicine and Pharmacy

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MONTREAL, JANUARY, 1882.

TO OUR SUBSCRIBERS.

We again earnestly desire to ask our subscribers to look at the date on their address label. Those who find that they are in arrears will oblige by remitting at once. We have cut off a number who have most willingly received the *Record* for a number of years, but who have never made any contribution to its support.

PERSONAL.

Dr. George W. Campbell, the venerable and esteemed dean of the Medical Faculty of McGill University, has, by the death of his brother, Mr. Campbell of Peatoun, Argylshire, Scotland, become heir to an old baronetcy.

Dr. Wilkins, Professor of Physiology, University of Bishop's College, Montreal, has been appointed Examiner in Physiology and Pathology in University of Toronto for 1882.

Dr. George W. Nelson (C.M., M.D., Bishop's College, 1880) has settled in St. Bonaventure, near Santa Barbara, California.

Dr. Rodolphe E. Leprohon (C.M., M.D., Bishop's College, 1879) of Lanesborough, Minnesota, has been appointed Surgeon to the Southern and Minnesota Division of the Chicago, Milwaukee & St. Paul Railroad. Dr. Leprohon has been in Montreal for a visit during the past month.

Dr. Costigan (C.M., M.D., Bishop's College, 1874) of Los Lunos, California, is at present on a visit to his relations in Montreal.

Dr. J. Leslie Foley, L.R.C.P. Lond (C.M., M.D., Bishop's College, 1880) has returned to Montreal and commenced practice.

Dr. George Baynes (M.D., McGill College, 1869) of Montreal has removed to the North-West, where he intends to settle.

Dr. Tetreault (C.M., M.D., Bishop's College, 1881) reports having performed a successful ovariectomy.

Dr. Seymour (M.D., C.M., McGill, 1879) has settled in Winnipeg, Manitoba.

Dr. Stephens (M.D., C.M., McGill, 1881) has commenced practice in Montreal.

HOSPITAL NOTES.

Montreal General Hospital.—Typhoid fever is somewhat on the decrease, only fourteen cases having been admitted during November, none of them of a severe type. Diphtheria still lingers on; four cases were admitted, two of which died from extension of the membrane downwards. Dr. Roddick performed an *excision of the knee joint* on a child six years of age, for chronic synovitis of about two years standing. The joint was exposed by a transverse incision across the patella, and the diseased cartilage pared off, the greater portion of the epiphysis being saved. The limb was kept in

position by means of a posterior splint and bandages charged with parafin. Strict antiseptic precautions were used; the case is doing very well, no unfavorable symptoms having appeared. An interesting case of *gunshot wound of the foot* is under treatment in Dr. Roddick's wards. The patient is a lad of fifteen; a charge of duck shot entered the right foot on the outer side, one inch in front of the outer malleolus, producing a large circular gaping wound $1\frac{1}{2}$ inches in diameter; it passed straight across the foot to a point on the inner side exactly opposite, the point of exit being smaller than the point of entrance. The cuboid and possibly all three cuneiform bones were found to be shattered; the particles of bone were removed along with a quantity of shot, dirt, paper, shreds of wool and linen. The ankle joint was unaffected, and both flexor and extensor tendons were free from injury. There was little or no swelling of the parts, and although there had been considerable oozing of blood, there was no evidence of injury to any of the important vessels. The wound was dressed antiseptically, and so far the boy's condition has been excellent.

Hotel Dieu.—Among the numerous operations performed during the past month, the following possess features of special interest.

Lithotripsy.—A young man was admitted suffering from gonorrhœa of six weeks' duration. Previous to that time he had been in perfect health, having no trouble whatever with his water. He had been seen by Dr. Lapthorn Smith, who suspected the presence of a vesical calculus in addition to the gonorrhœa. Dr. Hingston confirmed the diagnosis, and on measurement, the calculus was found to be $1\frac{1}{2}$ inches in its longest diameter. It was lithotritized at two sittings, and the bladder washed out by means of Bigelow's improved instrument. The questions of interest in this case are: had the calculus formed in the period of six weeks since the gonorrhœa was contracted? or had it existed anterior to the gonorrhœa, without giving any evidence of its presence.

Excision of Hip was performed by Dr. Hingston upon a girl of fifteen, who had suffered from hip-joint disease from the age of five years. She had in the interim recovered sufficiently to go about with tolerable comfort, but a renewed inflammatory attack three months ago had confined her to bed and caused her great suffering. Spasms of the muscles took place which defied the power of nar-

cotics and anti-spasmodics, weights and pulleys. The long splint was tried without success; the muscles chiefly at fault were divided subcutaneously, without giving permanent relief. The fever ran very high—temp. 103° , pulse 140, tongue red and furred, appetite gone. Her condition was so serious that life could not have lasted long; excision was therefore decided upon. The knife was made to take a crescentic sweep around above the large trochanter down to the neck. The periosteum was cut through, and with one of Langenbeck's instruments, it and the attached muscles were peeled off down to the small trochanter, where Butcher's saw divided the bone. The head and greater part of the neck had been already absorbed. The wound was carefully washed out, and a drainage tube laid along the track by which pus had hitherto escaped on the outer aspect of the thigh. So far the patient is doing well.

Notre Dame Hospital.—In the medical wards, there is under treatment an interesting case of chronic rheumatic arthritis. The patient is twenty-three years of age, and has been suffering from arthritis for two years. The metacarpophalangeal articulations of both hands were first affected, then the corresponding joints of both feet, then the wrist and ankle joints: it has now reached the elbows, and there is partial ankylosis of both elbow joints. There was no history of acute articular rheumatism. The peculiar feature of the case is the age of the patient. The treatment consists chiefly of potas. iodid. and tonics.

A case of inflammation of the glands and prepuce with partial gangrene of the glans penis in an old man of 64 was operated on, but erysipelas set in ten days after the operation, and the patient died. The erysipelas did not attack the penis, but began at the nose and spread over the face and scalp, and in spite of tonics and stimulants, carried him off in eight days. There was no erysipelas in the hospital at the time. The case of traumatic peritonitis and hepatitis mentioned in the November number did well on opium alone without local applications, and is now quite well.

In cases of simulated neuralgia Dr. Laramée is in the habit of using hypodermic injections of water. The result is invariably good, the pains being relieved at once. Dr. Laramée does not believe that genuine neuralgia can be relieved by cold water hypodermics.

A number of cases of chancroid are treated in this hospital. Iodoform in the form of powder or oint-

ment seems to be the favorite application. Sometimes chancroids are excised by means of the knife or scissors, occasionally Ricord's paste is employed.

REVIEW.

A Manual of Histology. Edited and prepared by THOMAS E. SATTERTHWAITE, M.D., of New York, in association with fifteen other known authorities, with one hundred and ninety-eight illustrations. 8vo. pp. 478. New York: W. Wood & Co., 1881. Montreal: Dawson Bros.

This volume represents the work of American histologists, and may fairly claim in more than one respect to be purely American in its character, proving that there are many thoughtful minds in this country eminently fitted to make original and independent histological investigations. Taking the form of a text book it will be found to contain all the essential facts usually described in works of a like nature. The editors treat their subjects in a thorough practical manner, avoiding unnecessary details so as to keep their work within reasonable bounds, and, therefore, they have developed a book which will be valuable to the student of histology. That the authors have been successful in their efforts causes no surprise, as the majority of them are practical teachers, and, therefore, conversant with the subject in all its details. The chief editor has wisely omitted the subject of optical principles and details of microscopes, etc., which usually in kindred works occupy too much space; inserting only such information and methods of working as are absolutely required, and with which the student must be familiar if he expects to be successful in his examination of the various tissues. Of the illustrations more than one hundred are original, the balance being copied from other works; they are for the most part clear and well defined. Each chapter is accompanied by a Biographical Index which forms a very useful guide to the literature of the various subjects. Dr. Satterthwaite is responsible for the first nine chapters. The apparatus required, use of the microscope and the methods of preparing objects are explained, so that no one should fail to successfully perform the mechanical portion of his investigations. The blood is very thoroughly treated in chapter III., and in the next epithelium. Chapters V., VI. and VII. include the connective substance group, comprising the Mucous, Fibrous, Adenoid, Bone and other tissues.

Chapter VIII. gives a clear description of the teeth from an histological standpoint, and chapter IX. an extended description of the general histology of the nervous system.

Chapter X., On Muscular Fibres, by Dr. Wright of Harvard University, contains much interesting original matter. Dr. Wenets, New York, in chapter XI. deals with blood vessels and their structure, the endothelial layer being specially described; his views in regard to the latter are that from this layer desquamation takes place as a normal process; that these detached portions on separation resemble ordinary leucocytes, and the nuclei of these cells appearing as free granules in the blood are identical with the bodies known as microcytes or hæmetoblasts.

Chapter XII., The Lymphatic System, by Dr. Birdsall, New York. All the latest information on this most important subject is here presented, and we fully agree with the writer that this system has not as yet received that attention from histologists which its importance should demand.

Dr. Mayer of New York follows in chapters XIII. and XIV. on the liver and biliary apparatus and the kidney. They contain the evidence of the author's ability, the views expressed being the results of personal investigation into the minute anatomy of these organs. Dr. Simes, University of Pennsylvania, devotes the next two to the male and female organs of generation, and Dr. Westbrook of Brooklyn, one on the respiratory tract. Chapter XVIII. gives much that is original on the skin by Dr. Robinson of Bellevue Hospital. The remaining chapters treat of the following subjects: the central nervous system, the eye, the ear, the nasal fossæ, the mouth and tongue, the alimentary canal, the spleen, pancreas, etc. The thick cutis vera, by Dr. Warren, is now for the first time described as a distinctive portion of the skin; the author's discovery of the fat columns explains certain pathological changes hitherto not much understood—the urinary excretory passages and supra renal capsules. The last chapter is on the mammary gland, and is one of the best descriptions on this subject to be found anywhere.

In conclusion, we consider this volume to be an exceedingly valuable text book; it is practical throughout, and therefore for the purposes of the student well adapted to aid him in his studies. We have no hesitation in recommending our readers to give it a place in their libraries.

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Original Communications.

TWO CASES OF DIABETES INSIPIDUS.

BY

CASEY A. WOOD, C.M., M.D., Attending Physician to the Woman's Hospital; Professor of Chemistry and Medical Chemistry, University of Bishop's College.

[Read before the Medico-Chirurgical Society.]

I do not lay claim to the advancement, this evening, of anything new on the subject of diabetes insipidus, but as the disease has always possessed considerable interest for me, and since, so far as I can learn, it has not been brought before this Society in the shape of a paper for some years past, I now present it with the expectation of adding to my knowledge from the experience of other members. The first case that I ever saw was that of a medical student under the care of Dr. David. I have had an opportunity of seeing the patient at intervals during the past three years, and have obtained from him an account of his family and previous history which I shall proceed to give. In October, 1878, he was 20 years of age; had always been sickly as a child, and at 12 years of age had a slight attack of diabetes insipidus, but was improved and perhaps cured within a year after the attack, the benefit derived in this way from treatment having been attributed to his taking tincture of iron for most of the time. From

that date until 1878 he enjoyed much better health, but upon occasions had noticed a slight and temporary polyuria, sufficient to be annoying but never pronounced enough to require further treatment. His family history is an interesting one. Mother died of diabetes mellitus at the age of 56; his maternal grandmother was dead at 55 from a disease of which polyuria was a prominent symptom, and of his two brothers and three sisters the only one now dead, a sister, died at the age of 14 of diabetes, probably saccharine. Finally two uncles, on his mother's side, aged respectively 48 and 60, and now living, are the subjects of insipid diabetes. In Oct., 1878, about the time he came to Montreal, he began to notice that he was obliged to micturate much more frequently than usual; that he had to rise in the night-time to pass water, and that he would fill the vessel before morning. During the day he voided even a larger quantity until he calculates that he must have passed between 10 or 12 pints during the 24 hours. The urine was as clear as water, not albuminous, devoid of sugar, and the sp. gr. of that excreted before breakfast varied from 1006 to 1007 $\frac{1}{4}$. His appetite kept good, but he felt languid, had a dry, hot skin, and was so thirsty that he commonly drank four or five tumblers of water at a meal, and as much more between meals. On Oct. 16th Dr. David prescribed 3 j of fld. ext. Ergot three times a day, and ordered him, in addition, at meal times to drink only claret diluted

with water. His diet was limited to certain easily digested articles of food. He derived from this treatment almost immediate relief; the amount of urine rapidly diminished; its color soon returned, and the sp. gr. became normal, until at Xmas' time he regarded himself as perfectly cured. However, having been tempted to forget the dietetic portion of his treatment during the holiday festivities he had a recurrence of his former troubles, and he became almost as bad as during the previous October.

He now began to take the ergot again, resumed his old diet, and at the end of a few weeks the polyuria and other symptoms disappeared. Between January and May, '79, he had three slight relapses, but at each time found sufficient relief in the fld. ext. of ergot after a few drachm doses. From that time until the present he considers that he has been free from the disease, although he admits having passed at long intervals, for a day or two more urine than normal. He is now a young man of spare habit, sanguine temperament, and to all appearance enjoys fair health. The hereditary nature of the disease, in his case, appears to be pretty well established, since it can hardly be a mere coincidence that so many of his mother's relations are and were diabetic.

Of case No. II., occurring in my own practice, I can speak more fully. Mrs. M., æt. 50, has never had any serious illness up to the time of the present attack. She had, however, for years a chronic eczema of the right leg which until lately had defied all attempts to cure. About the 10th Dec., '80, was attacked by what she then thought to be Canadian cholera, that is, she had griping pains in the bowels, vomiting and diarrhœa, three symptoms that showed themselves at 10 p.m. and did not entirely leave her until the next day at five o'clock. From that time she had intense thirst, a dry parched mouth and tongue, and began to pass a large quantity of urine almost immediately after the diarrhœa had stopped. In addition to water, which formed her chief beverage, she drank tea, whey, gruel, ginger ale, cider, milk, lemonade, etc., but without affording much relief to the thirst which she describes as being constant and very tormenting. Soon her skin became dry and harsh, and she never perspired during the subsequent course of the disease. She never complained of pain, but lost flesh rapidly, and became very weak. I saw her on the tenth of March when these symptoms were all well develop-

ed. I also noticed that she was very irritable and nervous, and entertained all sorts of groundless fears and fancies. Her sleep at night was unrefreshing and interrupted by getting up to drink and micturate. Her appetite was very small and her bowels were inclined to costiveness. The frequent micturation appeared to me to result largely from irritability of the bladder, for she felt obliged to urinate almost every time she took a drink. This state of affairs continued without much change until the 7th of August last, when she was again seized with severe abdominal pains, accompanied by violent vomiting and purging, and followed by complete prostration. The attack began at 7 p.m. and lasted until 3 p.m. next day.

I have a record of her passing eight pints of water about the 1st of August: on 10th she voided only $3\frac{1}{2}$ pints, which gradually decreased until a week afterwards the urine was normal as regards its color, sp. gr., and amount in 24 hours. The improvement after the 10th was very marked. She began to gain strength and pick up flesh; her appetite got much better, and no longer tormented at nights she commenced to sleep well, and to feel refreshed and cheerful in the morning, in marked contrast to her former irritable temper and nervous condition. More than that, the eczematous patches on her leg have disappeared, and she now says she feels as well as, if not even better than, she ever did.

Regarding the physical and other properties of the urine in this case I may say that it was invariably transparent and colorless, was never albuminous, and never gave evidence of sugar; that it deposited but very little sediment, was faintly acid and had no odor. From the record which I kept at short intervals for five months of the quantity and sp. gr. of the voided urine, I find that the latter varied from 1003 to 1004½, and that the whole amount passed during the 24 hours reached its maximum (as far as my observation went) on the 27th of April, viz., 203 ounces, and it was least on the 16th of July, amounting at that date to less than 100 ounces; but that it kept pretty constantly in the neighborhood of 150 ounces per diem. The amount of fluid drunk by this patient was carefully measured for some time, and found to correspond closely to the amount of urine she voided. Those days when the urine passed was less than the amount of liquid taken were invariably followed by an

increased quantity ratio of voided urine to fluid drinks. For example, on the 12th of March she passed 162 ounces of urine with a sp. gr. of 1004 and drank only 140 ounces, but on the following day she voided 144 ounces, sp. gr., 1004 $\frac{1}{4}$, and drank 157 ounces. I regret that I neglected to estimate the proportion and total quantity of urea in these instances.

As for the treatment, I have only to say that beyond ordering frequent sponge-baths, variety in drinks used, insisting on the patient's taking easily digested food and living generally a strictly hygienic life, I gave nothing in the way of medicine, unless a placeboic quinine mixture be considered as such. In fact I endeavored as much as possible to carry out Bouchardat's directions for the conduct of such cases.

I do not know, however, that this treatment had much effect on the disease. It seemed to me that the polydipsia, thirst, dry skin and nervous disorders were about as plainly marked when I first saw her on the 10th of March as they were during the week before these symptoms so suddenly left her on the 7th of August. Probably if I had grown tired of practising hygiene about the 1st of that month, and had given fld. ext. of ergot, as Da Costa advises, or had followed in Trousseau's footsteps and administered powdered valerian, or had even prescribed diluted nitric acid, with which Henry Kennedy has never yet had a failure, I might now entertain a different opinion on the question of therapeusis in diabetes insipidus; as it is, I know that my patient recovered in much the same way she took ill, and that the disease displayed throughout the most sublime indifference to hygienic measures.

Montreal, Nov. 20, 1881.

Progress of Medical Science.

THE HYPODERMIC INJECTION OF MORPHIA.

By W. A. B. SELLMAN, M.D.

(Read before the Baltimore Medical Association at the stated meeting held March 14th, 1881.)

It is generally recognized that Dr. Wood, of Edinburg, was the first to administer medicines hypodermically, as he made use of this method as early as 1843. It was made known after being

extensively tested, and the results were published in 1859 by Dr. Charles Hunter, of London, while Behier, Courty and Follier, of France, and Oppolzer, Scanzoni and Graefe, of Germany, are chief among those who, in that and the succeeding year, spread intelligence of its merits. Mr. Rynd, of Dublin, claims that the subcutaneous injection of medicinal substances, to combat neuralgia, was first used by himself in 1844. Dr. Sieveking, of London, attempts to establish that Dr. Kurzak, of Vienna, was the first to inject medicines under the skin. Dr. Isaac E. Taylor, in an article in the *New York Medical Gazette*, April, 1870, claims that Dr. Washington and himself used this method in 1839. They punctured the skin with a lancet, and employed an Ansel's syringe to throw a solution of the medicine under the skin. In this country, Dr. Ruppaner was the first writer upon hypodermic medication (May, 1860). In 1865, Dr. Charles Hunter edited a work, "On the Speedy Relief of Pain and Other Nervous Affections by Means of the Hypodermic Method." In the same year appeared Dr. Albert Eulenberg's book on "The Hypodermic Injection of Medicines Treated According to Physiological Experiments and Clinical Experience." In the same year, Dr. E. Lorent, of Bremen, published a treatise on his "Clinical Experience with Hypodermic Injections." During this year appeared the first book written on this subject in this country, by Dr. A. Ruppaner, of Boston, on "Hypodermic Injections in the Treatment of Neuralgia, Rheumatism, Gout and Other Diseases." The most excellent and comprehensive book of Dr. Roberts Bartholow, on "The Treatment of Diseases by the Hypodermic Method," has passed to its third edition. Dr. H. H. Kane has edited a work on "The Hypodermic Injection of Morphia: Its History, Advantages and Dangers," 1880; also "Drugs that Enslave," 1881, which treats of the opium, morphia and hashisch habits.

In regard to the salt of morphia to be used hypodermically, there are various opinions. Dr. Eulenberg prefers the hydro-chlorate; his formula is four grains of the hydro-chlorate of morphia, four drops of hydro-chloric acid, one drachm of distilled water. Dr. Wilson (*St. George's Hospital Reports*, Vol. iv) claims that the sulphate should be used without the addition of acid. Dr. Bartholow prefers the sulphate, and it is the salt most frequently employed. Dr. Anstie dissolves the acetate in hot distilled water, with a minimum of acetic acid. Dr. Lawson, in the *Medical Times and Gazette*, Nov., 1870, recommends a solution of the muriate, gr. x, to aqua destil. 3 ii. This solution requires heating to give it fluidity at ordinary temperature. The addition of one-forty-eighth of a grain of atropia, to one grain of morphia, is preferred by Dr. Brown-Sequard in obstinate neuralgias. Dr. H. H. Kane ("Drugs that Enslave") advises the use of the following formula for the preparation of solution of morphia, that will keep for a long time unchanged, never

causing abscesses, and when carried in the pocket for months being in as perfect condition for use as when freshly prepared: Take four fluid ounces of boiling distilled water, add two grains of salicylic acid and sixty-four grains of sulphate of morphia; stir with a glass rod until they are dissolved. Filter through coarse filtering paper, while hot, and keep in a glass stoppered bottle, of green glass. Prof. Luton, of Reims, uses cherry laurel water as a menstruum; he claims that it will keep indefinitely.

The dose of morphia, according to Bartholow, "varies from one-twelfth to one-half a grain. *In commencing, it should not exceed one-third of that ordinarily administered internally.*"

I use twelve to twenty minims of Majendie's solution as a single injection.

The immediate effect of the injection is a smarting, sometimes, pain, in the part. At times this amounts to only an itching. There is a sense of heat and of fullness in the head, and where the injection has entered a vein, a giddiness and singing in the ears. In some cases there is nausea. "Loud borborygmi not unfrequently occur at the moment the cerebral symptoms are perceived." Walking becomes difficult; the face is flushed, mouth and tongue dry; the hearing is more acute than normal. After a variable length of time, the pain, for the relief of which the injection was given, disappears, and the patient either goes to sleep or lies in a state of calm repose. Dr. Hunter has remarked the effect of this treatment in lowering the pulse in acute mania. He also observed the diminished rate of respiration. Bartholow, in his work, cited previously, presents a diagram of the pulse, temperature and respiratory movements, and also sphygmographic tracings.

Cutaneous irritation, especially itching of the nose, is developed, and diaphoresis usually follows. Should the injection be administered after a full meal, digestion is suspended for several hours. Constipation generally results; the kidneys secrete less urine, and there is some difficulty experienced in urination. Bartholow claims that there is a diminished secretion of bile, whereas Dr. Rutherford, in the *British Medical Journal*, February, 1879, "has found by experiment on the dog that morphia sub-cutaneously injected has no effect on the secretion of the bile." Some patients experience headache and nausea as the effects of the medicine pass away. In other cases there is a rambling conversation, and still in others delirium. The effect passes off in about sixteen to twenty hours, although I have seen cases where it lasted for thirty-six hours. M. Calvert (Thèse de Paris, 1877, *Etude Experimentale et Clinique sur l'Action de la Morphine*) presents:

1. A physiological research of the action of morphia upon the various functions of the organism.
2. A clinical study of morphia as a therapeutical agent, especially in the relations of acute to chronic morphinism. In the first, he observes

that both intravenous and subcutaneous injection of the hydrochlorate of morphia accelerate respiratory movements, this acceleration being followed by a period of retardation, and sometimes a momentary arrest or respiratory syncope. The same relative effects occur with the cardiac movements. During this time animal heat exhibits analogous phenomena, namely, the elevated is followed by lower temperature. In fact, the absorption of morphia by subcutaneous injection produces a very marked influence upon the reflex actions.

In 1879 I injected twenty minims of Magendie's solution into the arm of a lady, about thirty-two years of age, to whom I had given hypodermic injections previously. The patient was accustomed to take half-grain doses of morphia by the mouth, which accounts for my giving this unusual dose. I injected into the arm above the elbow. In three minutes she appeared to be under the full influence of the drug, perfectly relaxed and speechless. The patient resided in the country, and I did not visit her until the second day after the injection. The attendant reported that she had remained in the comatose or stupefied condition, in which I had left her until a short time before my arrival; that is, the stupefied condition lasted about forty hours. I examined the patient; she was free from pain, but extremely prostrated. I would note the fact that there had existed complete inactivity of the kidneys. The case progressed favorably.

Dr. Lorent reports a case of deep narcotism following the injection of morphia. "The patient was a delicate male, forty-three years of age, suffering from delirium tremens; one grain of morphia was administered. The pupils were so contracted as to appear entirely closed. There was perfect insensibility to pricking with a needle. The pulse was very slow, and respiration sank even to six in the minute, so that, fearing a fatal termination, artificial respiration was maintained. The threatening symptoms, however, soon subsided, and from the favorable termination of the delirium tremens which soon followed the large dose seemed to have exerted a good influence.

Dr. E. T. Wilson, in an article in the *British Medical Journal*, May 24th, 1879, complains that, in a number of cases, his patients have been peculiarly affected. Scarcely has the fluid entered beneath the skin when the most intense feeling of irritation and pricking is felt in the part, spreading from the puncture rapidly all over the body. At the same time the skin becomes suffused with a bright blush. The heart's action then becomes greatly quickened, and there is a throbbing, rushing feeling through the head. The hands were somewhat swollen and the lips had a glazed appearance. In one case the patient became rapidly unconscious as if knocked down by some sudden shock. The symptoms subsided gradually, leaving behind great pain in the head.

In a communication to the *British Medical Journal*, March 2nd, 1872, Dr. Hausmann ex-

presses himself as having observed—as Nussbaum and Muhe had previously done—that the subcutaneous injection of morphia is sometimes followed by pain and redness of the face, contractions of the muscles of the lower jaw, a hammering, frequent pulse (130), dyspnoea and clonic spasms of the limbs. These symptoms lasted five minutes. The spasms first ceased. Then the pulse became quiet, and at last violent sweating broke out. Hausmann is disposed to accept the explanation given by Nussbaum that in such cases the morphia directly enters the veins. The production of the phenomena did not appear to depend on the quantity of morphia injected.

Dr. H. Harrington (*Chicago Medical Journal April, 1879*) "was called a short time since to treat W. S., male, aged 62, for acute dyspepsia (bilious attack), accompanied by very severe pain. Administered hypodermically, in hypogastric region, sulphate of morphia 0.02 grains. Before the syringe was emptied, alarming syncope supervened, and recurred twice at intervals of ten or fifteen minutes; stimulants administered freely, artificial respiration and the use of electricity, were successful in reviving the patient. Neither narcotism nor coma were in any degree present."

Dr. E. F. Ingalls (*Chicago Medical Journal and Examiner, May, 1878*) says "I know of no precaution which will render the hypodermic injection of sedative doses of morphia entirely safe; the medicine may be given in this way a thousand times without harm; but the next time it may produce death. The danger appears to arise from rapid absorption or injection directly into the circulation, and it is greatly enhanced by the impossibility of removing the poison."

Dr. H. Gibbons (*Pacific Medical and Surgical Journal, June, 1878*), complains of the peculiar effects in a large number of cases.

Dr. H. H. Kane reports a large number of cases where the injection was followed by peculiar and very frequently alarming results. He advises the use of a ligature or small tourniquet, to be placed around the arm above the point of intended puncture; should any symptom of syncope come on after the injection, he tightens the ligature, and the patient is immediately relieved, for the medicine cannot pass into the system.

Dr. E. F. Ingalls addressed circulars of inquiry to eighty physicians of the Northwest, and thereby brought to light seven fatal cases not heretofore reported. In two of these the amount given was believed to be only that habitually used by the profession, but was not positively ascertained. In one case one-fifth of a grain, with one seventy-fifth of a grain of atropia; in another, one-quarter of a grain, given for sciatica, proved fatal. One death was from two doses of one-third of a grain each, with an interval of four hours between the first and second doses. Another death was caused by two doses of one-quarter of a grain each. In another case, where the patient was suffering from neuralgia of the muscles of the back,

one-sixteenth grain of sulphate of atropia was injected; no relief being given, one-quarter grain of morphia was administered by the mouth. In three-quarters of an hour from that time, one-quarter grain of morphia was injected hypodermically, which soon quieted the patient. The doctor left, and the patient died within a few hours.

The *Lancet*, Nov. 8th, 1879, reports a case where the patient (a lady) used the enormous quantity of twelve grains for a single injection, using, during a violent attack of facial neuralgia, twenty grains during twenty-four hours. The last injection produced tetanus, caused by the irritation of the puncture of the needle, and death ensued.

Dr. Z. P. Sleight (*Practitioner, July, 1871*) gives the results of his experience with this mode of medication, "derived from two thousand injections of morphia, while house-physician to the Manchester Royal Infirmary." He reports that, with one exception, he never saw any immediate ill effects from it, and only in one case, any great evil result from its prolonged use.

Many physicians hesitate to employ the hypodermic syringe for fear that it may produce a craving for anodynes. The *Lancet*, October 11, 1879, contains an article on hypodermic "drum drinking," and regrets that the hypodermic syringe has been allowed to pass into other than professional hands, and considers that a physician should be held responsible when he instructs a patient to use the instrument. It is an indisputable fact that there are a considerable number of persons who are slaves to the habit of constantly employing hypodermic injections upon themselves, but the physician does not run the same risk of producing the morphia habit when he uses the syringe as he does when he administers the drug by the mouth. The patient can secure his morphine from the druggist, and he generally finds out what quantity to take as the dose is popularly known. But he has great difficulty in buying a hypodermic syringe, and he does not know what salt or quantity to inject. I claim also that the habit, when established, is very much more easily broken off than when the agent is taken by the mouth. I recall a case (a lady) in whom I commenced the use of the hypodermic injection of morphia, in May, 1874. For three months I injected every second day, for the succeeding nine months daily, during the next two months twice a day, after that daily until November, 1878. At that time I determined to cease using the agent. I did so suddenly, refusing to taper off, and not giving any anodynes by the mouth. The patient was much prostrated, but progressed favorably, and has not had a hypodermic injection since. There was no opiate of any kind allowed for several months. Since that period, I understand that morphia has been administered by the mouth for the relief of pain.

Dr. J. Braithwaite (*Lancet*, November 17th, 1877) reports a case of discontinuance of morphia after its use hypodermically for seven years. The patient, a lady, injected it herself, sometimes to

the amount of fourteen grains daily. She suddenly determined to give it up entirely. "Violent vomiting and purging were the result, but she persevered, and is now well."

There exists a difference of opinion in regard to the point of puncture. I have always secured the full effect of the drug when inserted at a point distant from the seat of pain, generally selecting the left arm above the elbow.

M. Charppe, who has performed many subcutaneous injections with the hydro-chlorate of morphine, asserts that they act more promptly, the nearer they are made to the seat of pain.

Dr. Lorent advises localization of the injection. Dr. Eulenberg states, that, in a case of double rheumatic sciatica observed by him, complete relief of pain for a space of from two to three days followed each injection, upon the side upon which the injection was made, while upon the other side the pain immediately returned upon the subsidence of the effect of the narcotic upon the nervous centres. His conclusions are: "After the subcutaneous administration the sensibility of the region injected is considerably diminished, while the corresponding symmetrical region of the other side of the body shows no change or a relatively much lesser degree of diminution. If an injection be made at a point where a sensitive (or mixed) nerve runs superficially under the skin, sensibility is diminished, not only at the place of injection, but also over the whole surface to which the nerve is distributed, nevertheless, in the greatest degree at the point of injection."

Phlegmonous abscesses not unfrequently form at the point of puncture. It is unaccountable why they should form in some cases only. During the past year I have had a large number of abscesses to form after injection. I generally make my own solution, and last June purchased one drachm of morphia, labeled with the name of a celebrated manufacturing chemist. All the cases in which I used this preparation have had terrible abscesses; they were some fifteen in number. As soon as I discovered this effect of the injection I secured another bottle of morphine, but of a different manufacturer. I used the same syringe and needles, and have not had an abscess since. I took the remaining morphia to a chemist for analysis. Unfortunately there was not sufficient remaining to produce positive proof of impurities in the drug. I would state that there did not appear to be any general poisoning of the system, but merely local irritation. Cauterization with the solid nitrate of silver at intervals appeared to be the most successful treatment.

Dr. George E. Jones (*Cincinnati Lancet and Clinic*, 1878) says:

"Injections under the skin are, as a general rule, painful, and are liable to produce abscesses.

"Deep injections are not painful, and are not so liable to produce abscesses.

"The injection fluid must be at least of the same temperature as the body."

Dr. E. Peyreigne (*Revue Med. de Toulouse*, xii, 309-320) reports phlegmonous abscesses following hypodermic injection of morphia chlorohydrate.

Dr. H. H. Kane considers that these abscesses are due in the majority of instances to (a) carelessness in injecting, (b) unclean needles, (c) a dirty or over-acid solution, or (d) a low condition of the general system, predisposing to inflammation and suppuration on slight irritation.

The question arises, in what diseases is the hypodermic injection of morphia indicated? By the introduction of narcotics into the cellular membrane of the body we have a mode of attacking and subduing cerebral excitability more rapid and more certain in action than the stomachic method. In a great number of diseases there can be no certainty about the stomachic dose. "In delirium tremens, for instance, the pill, the draught or powder, may lie in the stomach undigested; it may be vomited; it may be absorbed partly or entirely, and if the latter, so slowly as to do no good. In the meantime the life of the patient is at stake, and death from exhaustion may occur before that sleep, which would save the patient, can be procured. With the hypodermic syringe sleep can be secured or delirium quieted in a few minutes. The certainty of effect should follow, for the whole amount injected must be all absorbed and circulated. In the mentally overtaxed or the melancholic patient, the night administration will not cause sleep at all times; it sometimes rather arouses the brain; it may even keep the patient awake, in 'a calm state of doze,' which has the equivalent effect of good sleep the next day. The patient will arise refreshed, mentally stronger and fit for his day's work."

Dr. Hunter asserts, that, "for derangements of the cerebral nervous system, we have, in the hypodermic method, a means of treatment, far exceeding, in its immediate efficacy, any other mode of medication."

Dr. C. Lockart Robertson (*Practitioner*, May, 1869) writes, that the "value of this treatment of mental disease is still much unappreciated, despite its satisfactory working. Prolonged wakefulness, maniacal excitement, obstinate and persistent refusal of food, or drink, or medicine, and destructive, suicidal tendencies, are indications for the employment of this treatment."

Dr. Bartholow speaks of the benefit being more conspicuous in the early stages of mania, and considers that to be the case, especially, in puerperal mania.

Dr. Anstie (*Reynold's System of Medicine*, vol. ii, p. 90) advises the hypodermic method to be employed in delirium tremens, in preference to giving the opium by the mouth.

Dr. Maudsly (*Reynold's System of Medicine*, vol. ii, p. 60) recommends this treatment in insanity. He adds the caution that at times it will not quench the fury of acute mania, and that successive injections, followed by brief snatches of fitful sleep, have been succeeded by fatal collapse.

Dr. O. J. Wolff (*Archiv. fur Psychiatrie und Nervenkrankheiten, Band ii*) considers the state of the arterial tension to be the guide to the use of morphia. "If there be a low state of the arterial tension, with slow pulse, small doses are indicated. When the pulse is quick, and tension high, large doses may be given. Caution should be used in administering large doses to the obese and the aged. It may be used in both curable and incurable cases."

Kraft-Ebing (*Bulletin of General Therapeutics, 1870*) has used morphia subcutaneously in hypomania, with excellent results, also in the treatment of "moral hypochondriasis, and all forms of neuralgias."

Radcliff (*Reynold's System of Medicine, vol. ii*) treats cerebro-spinal meningitis with the hypodermic syringe. Bois and Niemeyer have had favorable results from this treatment. Dr. A. Arnold coincides with the above.

Bartholow speaks of having witnessed wonderful cures from this treatment, especially in the stage of irritation, and considers it to be useless when paresis occurs.

Dr. Hutchinson (*Pennsylvania Hospital Reports, vol. ii*) has secured almost instant relief by the injection of one-quarter grain of the sulphate of morphia in cases of sunstroke, rapid recovery following.

In all forms of convulsions the hypodermic method is indicated. I use it even in infants, and consider that I have saved life where different treatment would have failed.

In all varieties of hysteria this is a dangerous remedy to make use of, on account of its producing a craving for this form of stimulation. I doubt whether there is a single member present, who has not regretted administering the first hypodermic to a hysterical patient. The infatuation amounts to something terrible, and the physician is called upon at most unreasonable hours to administer the injection.

Brown-Sequard treats epilepsy most successfully by a combination of morphia and atropia.

Bartholow considers that "the hypodermic injection of morphia is preferable in those cases where the paroxysms occur at night, and in convulsive tic. He does not consider it proper, as a general rule, in cases dependent upon cerebral lesion. When the paroxysms succeed each other rapidly, and are violent, the injection may be made during an attack.

Scanzoni, Landër, Lehmann and Hermann, use this method successfully in eclampsia.

Prof. Loomis gives one-half grain doses in the convulsions of albuminuria, repeating the dose if required, having given as much as two grains within a few hours.

Hunter and Levick, of Philadelphia, have found this treatment successful in chorea. Bartholow limits it to very violent cases of chorea. The hypodermic syringe has been experimented with in the relief of tetanus and hydrophobia; it has given

sleep and diminished spasm, but without permanent effect or arrest of the disease.

Eulenberg has relieved the muscle spasm succeeding amputation of the thigh.

Bartholow considers this treatment very successful in the relief of the painful jerking of the muscles which occur in cases of fracture.

J. Russell Reynolds reports relief of "writer's cramp" for a certain period, but no permanent cures.

Wm. Roberts (*Reynold's System of Medicine, vol. i*) has had the most successful results in relieving the pain associated with "wasting palsy."

In the treatment of neuralgia, the hypodermic method cannot be superseded by any other. The most brilliant results have been achieved by this means.

Dr. F. E. Austie (*Reynold's System of Medicine, vol. i*) considers that the invention of the subcutaneous injection has thrown a new light on the capabilities of opium as an anti-neuralgic. "It may be confidently said that, in the right use of this remedy, we possess the means of permanently and rapidly curing very many cases, and of alleviating the most inveterate forms of neuralgia."

Bartholow has a very elaborate article on this affection treated hypodermically, to which I refer you.

In a number of the affections of the respiratory system, the hypodermic method is every efficacious.

The paroxysms attending asthma are quickly relieved. Vulpian, Hirtz, See and Bartholow, commend this treatment.

Dr. J. Keith Anderson (*Practitioner, Nov., 1875*), gives one-sixth grain of the hydro-chlorate of morphia with great success.

Dr. Leslie West adds his testimony as to the value of this treatment in asthma.

Pletzer, Waldenburg, Lorent, Kirkes and Jartzky, testify to the relief of the dyspnoea of emphysema.

Pleurisy and pleurodynia are much benefited, and the pain relieved.

Bamberger, Bartholow, Eulenberg, Erlenmeyer and Lorent, consider this method indicated in the cardiac neuroses.

Dr. C. H. Fagge (*Reynold's System of Medicine, vol. ii*) has often relieved the paroxysms arising from disease of the valves of the heart, by subcutaneous injections of morphia.

R. Douglas Powell considers this to be the best remedy to relieve pain in aneurism of the aorta.

Dr. Wm. Murray adds his testimony as to the efficiency of this treatment.

Allbutt and Bartholow advocate hypodermic injection of morphia in nervous dyspepsia with intolerance of food; also for relief of gastralgia and gastric ulcer.

Dr. Patterson presents wonderful results in the treatment of cholera. Of forty-two cases treated by morphia subcutaneously, twenty-two recovered,

and twenty died. Of ten cases "treated in the usual manner," nine died and one recovered.

Bartholow considers morphia injections "the most serviceable remedy for the first symptoms in cholera, but when cramps occur, and collapse is imminent, morphia must be supplemented by chloral.

The vomiting of pregnancy may be controlled in most cases by a small morning injection of morphia.

Dr. Thos. Johnston (*Medical Times and Gazette*, April, 1869) strongly recommends this injection of morphia over the region of the stomach as a remedy in sea-sickness.

In all forms of colic, I employ the hypodermic syringe in preference to other treatment, on account of the quick relief it secures.

I have derived the greatest benefit in all forms of peritonitis by the early use of the hypodermic syringe.

In cystitis, both acute and chronic, this treatment relieves the expulsive efforts and diminishes the irritability of the mucous membrane. In calculus, the suffering of the patient is much relieved.

Dr. Z. C. McElroy (*St. Louis Medical and Surgical Journal*) has used these injections in epididymitis with the best results. He injects one-half grain under the skin of the scrotum. Constitutional treatment is instituted at the same time. No cases have been treated by him save those of urethral origin.

Dysmenorrhœa and the pain resulting from uterine applications and operations are relieved by the hypodermic injections.

Dr. L. F. Babcock (*New York Medical Journal*, Sept., 1870) relates a case where he prevented abortion at the fifth month by morphia, used hypodermically; also cures of acute rheumatism.

Dr. Korman (*Medical Times and Gazette*, Oct., 1868) uses the hypodermic in labor: 1. During painful dilatation and expulsive period, especially in primiparæ and in narrow pelvis; 2. Spasmodic pains; 3. In painful complications of the process of labor in general; 4. In severe afterpains.

Dr. Melvin Rhorer (*Medical Press and Circular*, 1871) has found the hypodermic injection of great benefit in labor, when turning is required.

Dr. F. D. Lente (*New York Medical Journal*, April, 1870) has relieved the headache accompanying chills by the subcutaneous injection of morphia.

Prof. Estlander claims great success in the treatment of traumatic erysipelas.

Dr. Thierfelder, of Meissen, strongly recommends this injection instead of chloroform inhalation, as a preparation to reducing dislocations.

Dr. Baroth has, by its assistance, been able to reduce hernia by taxis, after the usual remedies and manipulations had failed.

In conclusion, you will have observed that I have not relied altogether on my individual experience, but I have availed myself of the light that has been thrown upon the subject by the careful study and experience of many eminent and trust-

worthy members of the profession. On this account, I have made this paper much longer than I had intended, but the subject is of such importance that I do not feel justified in curtailing or dropping the reported wonderful cures in diseases where the hypodermic has previously been seldom employed.

The conclusions that I draw, after a careful analysis of the experience of the profession, are (1) that the hypodermic method is invaluable in cases where speedy relief from pain is desired, or where nervous excitement or mania requires to be quieted; (2) that the utmost care and precaution will not prevent the peculiar sensations sometimes experienced by our patients, which effects are seldom more than transitory; (3) in regard to abscesses, they will seldom result, unless there exists some impurity in the drug, or uncleanness of the instrument. In the cases that I reported, I feel confident that there was an excess of acid present in the solution of morphia; (4) that there are a few persons who cannot take morphine in any form, and that the use of the subcutaneous method is contraindicated in these cases.—*Maryland Medical Journal*, June 15, 1881.

TREATMENT OF SPRAINS.

R. DACRE FOX, F.R.C.S., Edinburgh.

The frequency with which sprains occur in general practice, and the somewhat unsatisfactory results of the treatment ordinarily adopted, induce me to bring forward a method that I have used in a great many cases with considerable success. Sprains may be broadly divided into two kinds, mild and severe; the former consisting merely of a temporary over-distension of the parts, around a joint, which rest and anodyne applications usually soon cure; the latter involving, as I believe, much more serious pathological results, which the following plan is especially contrived to obviate.

The effects of a severe sprain are that the fibrous ligaments controlling the movements of the joint and binding the tendons in their grooves become overstretched, swollen and softened; the cellular tissue about the ligaments and in the tendon-grooves becomes œdematous; and plastic material is exuded; while, as a consequence of these changes, the tendons are displaced in their beds. If this condition be not actively treated, it may, and often does, lead to continued lameness, due, in all probability, partly to a diminution in the caliber of the tendon-groove, with impaired muscular action, and partly to the torn ligaments and bruised cellular tissue having undergone changes which render them incapable of adapting themselves to the movements of the joint, which are consequently impeded. I believe this result may be prevented by the application of firm, direct, equal pressure, applied manually at first, and kept up and controlled by pads placed in the line of the tendons, and kept in position by properly shaped

plasters and bandages, and sometimes by splints. This pressure helps to disperse the cedema, to replace the tendon in its normal position, to hasten the absorption of any plastic exudation, and thus to prevent diminution in the caliber of the tendon-groove. I cannot say this is a novel method of treatment; but I think it is one not usually practiced, partly because it entails the expenditure of much time and trouble, and partly, I feel sure, because there is and has been a tendency to under-estimate the inconvenience and distress arising from a badly sprained joint.

The common practice in treating a sprain is to put on a bandage, telling the patient to take it off if the joint becomes painful, and to substitute warm water fomentations. When the swelling has subsided, if the injury be not so slight as to be already cured, a liniment or the application of iodine is generally ordered. Very frequently the tight bandage causes inflammation, while the rubbing and painting are practically useless. There are numbers of cases of slight sprain, indeed, which will get well with comparatively little treatment or none at all; but in that more severe form where, after an inflammatory or at least exceedingly hyperæmic stage, swelling takes place, with the results I have described, the application of these remedies does not prevent the joint from being left rigid, painful and unfit for use for a very long period. Now it is, as I have said, in preventing all this, that the plan of treatment by direct, equal and continuous pressure, will be found exceedingly valuable; for, where it has been properly carried out, I have always found that the joint returns quickly to its normal condition—pain being speedily relieved, and rigidly prevented. The treatment may be divided into two stages; the first lasting from a day to a week or longer, during which the treatment has to be directed to averting inflammation by rest, warm applications, anodyne lotions, etc.; the second commencing when the joint has become cold, swollen and painful on movement—in fact, when the injury has assumed a more or less chronic character. It is during this second period that I believe the active treatment I advocate ought to be employed. It is important not to commence this until the surface heat is normal; for undoubtedly, when any tendency to inflammation exists in the tendon-sheath, pressure aggravates it, and I have known it to lead to untowards results.

It is of course impossible, within the limits of this paper, to describe the special adaptation of this method to each joint; but I will take as an illustration the ankle. If a wire be passed around the joint so as to impinge on the two malleoli and the tendo Achillis, it will define three or four well marked hollows: one on each side of the tendo Achillis behind each malleolus, one in front of the fibula, with a fourth shallower one in front of the tibia. When the ankle is severely sprained these fossæ become obliterated, and are filled up

with effusion, overstretched ligaments and displaced tendons.

Observation has led me to believe that there are very few sprained ankles in which muscular displacement to some degree does not take place. It most commonly occurs in front of the outer malleolus involving the outer part of the annular ligament, the extensor longus digitorum, and the anterior fasciculus of the external lateral ligament; next perhaps the posterior peroneo-tarsal ligament and structure behind the external malleolus. Cases of similar overstretching and displacement on the inner side of the ankle are happily rare; but in gravity they bear much the same relation to the former as a Pott's dislocation does to a simple fractured fibula. I will assume an ankle-joint has sustained a severe sprain all round, and has arrived at the chronic stage; modifications of the treatment of such a case will meet all that are likely to occur. To carry out the first principles of treatment by direct, equal and continuous pressure, it is clear the fossæ mentioned above must be filled, or rather their sites covered by pads so as to cause the retaining plasters, bandages and splints to exercise equal pressure everywhere. By making pressure with the thumb from below upwards in the line of fossæ a good deal of the cedema may be squeezed away and the displaced tendons in some degree restored. I make, as a rule, five pads (of tow and lint or leather): two about four inches long by one inch wide (one a little shorter than the other, so as to be better adapted to the curve extending upward from the dorsum of the foot to the crest of the tibia); another shorter, broader and thinner, to place over the tibialis anticus and extensor proprius pollicis; and two, three or four inches long and bolster-shaped, to fill in the posterior fossæ on each side of the tendo Achillis. It is often advisable, in old-standing cases, to supplement the pads by strips of plaster to ensure firmer pressure. Both pads and strips of plaster should be made exactly to fit, as, if too large, they are useless, from the pressure being too diffused; and, if too small, they exercise too little pressure. A moment's consideration will render this obvious. If too large a pad, for instance, be placed over the outer postmalleolar fossæ, its edges rest on the tendo Achillis and outer malleolus like the pears of an arch, leaving the fossæ itself untouched. To keep these pads in their place, I use a long extended half-moon-shaped piece of plaster (*emplastrum saponis* spread on leather), long enough for the ends to overlap in front when the heel is placed in the center, and a narrow oblong piece above this, placed round the lower part of the leg, to cover the upper part of the pads. The handiest way to apply the pads is to place an India-rubber band above the ankle, to slip the pads under it, and then, planting the heel in the center of the curved plaster, to bring the two ends across the front of the joint so as to overlap. The pads having been secured in position, the elastic ring is to be cut, and the oblong piece of plaster put on so as to encircle their

upper ends ; lastly the whole ankle is to be firmly bandaged. Amongst the working classes, or in the case of an uncontrollable patient, it is advisable to apply two thin splints over the anterior pads, keeping them in position by a long strip of adhesive plaster. Where there is much superficial ecchymosis, where there are bullæ, or where there is unhealthy-looking skin, instead of using soap-plaster, the pads may be kept in position and pressure maintained by a piece of lint on which ointment has been spread. Calamine ointment made stiffly is clean, and not uncomfortably greasy. If, as occasionally happens, even this should cause irritation, warm wet lint covered by oiled silk may be advantageously used over the pads, and secured by a firm bandage ; but neither of the applications can compare in efficiency with the soap-plaster spread on leather.

It is, as I have said, impossible in the limits of this paper to describe the method of adaption of the pads to all the different joints ; but a very little consideration will suggest the shape, size and thickness necessary to be employed in each case. —*Chicago Med. Journal and Examiner.*

THE HOT PLATE—AN OLD BUT USEFUL REMEDY.

Many persons suffer from pains and aches in various parts of the body, pains rheumatic or neuralgic, or with pains in the stomach or bowels, or with menstrual pains each month ; some have a cold spot between the shoulders, or in the shoulder blades ; some have cold feet ; some are tormented with pain from old wounds, burns or injuries. In all these cases warmth is grateful, and often brings entire relief.

Hot fomentations are efficacious ; these must be skillfully applied or the patient's clothing and the bed-clothing will be wet, and the patient is made chilly and uncomfortable ; they must also be constantly re-applied.

Hot bottles are excellent, and fit nicely into the angles and corners of the body ; but bottles are not always at hand, nor is even hot water at times, besides the corks *will* sometimes come out, and then the bed is saturated.

Some have nice warmers made of tin, these are heavy and soon begin to leak ; the corks also work out sometimes.

Some scientific preparations have been made to hold heat a long time, such as spongio-pilin ; these are excellent, but not attainable by all.

In every household there are old plates of all sizes, and there is a stove or grate where the plates can be heated. These can be wrapped in any old sheet or flannel garment, and be instantly applied to any part of the body ; they will retain heat a long time, if well wrapped in flannel. Where hot fomentations or poultices are applied, the hot plate outside will keep them warm, so that they need not be changed for hours. It is quite wonderful

how much comfort and relief can be obtained from this simple remedy, which is always at hand, and within the reach of every person.

St. Louis, Mo. JAS. H. NORTH, M.D.
—*Monthly Review of Medicine and Pharmacy.*

TREATMENT OF SKIN DISEASES.

Dr. H. S. Purdon, physician to the Belfast Hospital for Diseases of the Skin, gives a brief account of his treatment in the *Dublin Med. Jour.*, March. He says : "For acne I am using, with benefit, glycerine internally, as suggested originally by Gubler—a substance so analogous to oils, and, like them, following the ordinary modes of elimination, in traversing the sebaceous follicles ; while, locally, if on the face, my friend Dr. Samuel Moore's ointment of sulphur and green iodide of mercury is the most useful application I know of. Acne, in young men and girls, often attacks the shoulders. Here, sponging with sea water and brisk friction with a rough towel is far over ointments or lotions. For parasitic affections due to vegetable growths, croton oil liniment, by producing suppuration, destroys the growth more rapidly than any of the vaunted parasitocides. The solution of the ethylate of sodium I still use in nævi, small warty growths, and some forms of lupus, although Volkmann's spoon is the best means of quickly curing the patient. For lupus erythematosus the local application of liquor potassæ has given me good results, while internally, in the acute stage, large doses of acetate of potassium relieve the congestion, and in more chronic cases I prescribe Thompson's solution of phosphorus. In chronic psoriasis I think there is nothing to equal either cold or tepid 'packs,' as used at the hydro-pathic establishments." *Phil. Med. Reporter.*

PAIN AND ANODYNES.

Dr. Roberts Bartholow, of Philadelphia, says : The most powerful means for relief of pain which is now in our possession—the subcutaneous injection of morphia and atropia together—is an illustration of the advantages derived from the study of physiological antagonism. By this combination the anodyne qualities of the two agents are enhanced, rather than diminished, while the disadvantages of each are in a great measure obviated. The combined use of morphia and atropia is, also, the best preventive of the tendency of anæsthetics, like chloroform and ether, to produce fatal paralysis of the heart or lungs ; while the prescription of atropia simultaneously with chloral to a great extent averts the dangers that sometimes attend the use of that agent.—*Nashville Jour. of Med. Surg.*

TREATMENT OF HEART DISEASES.

An interesting review of an article on this subject, in the *Italian Medical Gazette* of January, 1881, appears in the *Lyon Medical* of July 10, 1881. The writer of the article (Prof. Renzi) has evidently studied with care the actions of three important drugs largely used now-a-days in cases of heart disease—viz., bromide of potassium, iodide of potassium, and chloral hydrate; and he has given some important information regarding them. Bromide of potassium is shown to have such a direct influence on the heart and capillaries as to entitle it to a high position among the cardio-vascular drugs. According to Prof. Dujardin-Beaumetz, who considers it one of the best heart tonics we possess, the bromide, besides being a nervine sedative, acts directly on the heart, and lessens considerably any irregular action of that organ. He says that, as a nervine sedative, the drug is useful in counteracting the sleeplessness which so greatly enfeebles and wears out patients suffering from heart disease, while its value in such cases is greatly enhanced by its direct beneficial action on the diseased organ itself. According to Prof. Sée (largely quoted along with Dujardin Beaumetz by the writer of the article), bromide of potassium is especially useful in heart affections where we have diminished arterial pressure, rapid and irregular action of the heart, passive congestions, œdema, cyanosis, dyspnoea, and sleeplessness.

Iodide of potassium is shown to be very beneficial in dyspnoea arising from heart disease. It is also of great value in arresting degenerative changes in the heart tissue.

The action of chloral hydrate on the heart, as observed by Prof. Renzi, is at once to diminish the rapidity of its action, and after a time to reduce its energy. The drug seems to act on the heart by paralyzing either the cardiac ganglia or the vasculo motor centres in the brain. The researches of Claude Bernard, Rokitanski, and others, would indicate that the latter are chiefly affected by the administration of chloral for they found that it caused great diminution of blood pressure by dilatation of the capillaries.

In summing up his observations on the three drugs referred to Prof. Renzi says of bromide of potassium that it lessens the anxiety of patients suffering from heart disease, gives them a certain sense of comfort, and enables them to breathe freely. Under its influence sleep is more easily obtained, is more tranquil, and of longer duration than when induced by other drugs. It is, moreover, a more natural sleep. The bromide reduces undue rapidity of the heart's action and of respiration. Cough, however, seems to be aggravated by the use of bromide of potassium alone.

Of iodide of potassium, he says that it is a most useful drug in diseases of the heart. One of its chief effects is a complete relief from dyspnoea and all asthmatic symptoms.

Chloral hydrate is not much esteemed by him. It can procure sleep of a kind, but is of no use in relieving the dyspnoea so troublesome in cases of heart disease. It is, moreover, dangerous when given in conjunction with iodide of potassium, the latter drug apparently having the effect of greatly increasing its soporific action.

From Prof. Renzi's summing up, it would seem that a combination of the iodide and bromide of potassium is a most beneficial remedy in cases of heart disease.

TO PREVENT LACERATION OF THE PERINEUM DURING LABOR.

Dr. Mossman (*Am. Journal of Obstetrics*) claims that by artificial dilatation of the perineal structures before the head reaches the floor of the pelvis laceration may be prevented. In uncomplicated labor his method has never failed to prevent rending even so much as the mucous membrane covering the inner sides of the forchette. His directions are as follows: Anoint the vagina as far as the finger will reach with melted lard and extract of belladonna; if the first stage of labor lasts for one or two hours, two or three such applications should be made. When the os is so dilated that the cervix is in no danger of laceration, begin at once artificial dilatation of the perineum. Applying the belladonna ointment freely, place one or two fingers in the vagina and make pressure lightly but continuously downward and forward. When the head descends so as to press upon the perineum, remove the fingers from the vagina, and introducing them into the rectum, place the thumb upon the occiput of the child, pull the perineum forward and upward and press the head upward under the pubes whenever a pain comes on (Goodwell's method of protecting the perineum.) When the pain ceases and the head recedes apply the dilating force with the fingers in the vagina as before, alternating the pressure from within with the forward traction during the pain, and retarding the expulsion of the head until the dilatation is sufficient to allow the escape of the head without laceration. In Dr. M.'s opinion the shoulders rarely cause laceration after the head is safely passed.

TREATMENT OF CHRONIC ECZEMA.

Avoid the use of soap as this is irritating. Twice a day, bathe the part in an aqueous solution of borax, one ounce to the pint. Dry without friction and freely apply the benzoated zinc ointment, then bandage the part firmly with old dry muslin which has been previously wet with a saturated aqueous solution of borax. Over this apply a bandage of oiled silk in such a manner as to exclude the air perfectly. Let the bowels be kept regular. In the majority of cases eczema can be promptly cured by the simple exclusion of air. Eczema of the fingers will generally yield in a few days if the air be excluded by the ordinary rubber cot.—*Chic. Med. Rev.*

INFECTED MILK.

Mr. Ernest Hart, the editor of the *British Medical Journal*, offered to the London Congress a tabular abstract made from a study of seventy-one recent epidemics due to infected milk. He states that the three diseases which have as yet been recognized as capable of being spread by milk are typhoid fever, scarlatina, and diphtheria. There is nothing in the analogy of epidemics to limit the list permanently to these; and already there are indications of other cognate diseases being spread by the same agency. The number of epidemics of typhoid fever recorded in the abstract as due to milk is fifty, of scarlatina fourteen, and of diphtheria seven. The total number of cases traced to the drinking of infected milk occurring during the epidemics may be reckoned in round numbers as thirty-five hundred of typhoid fever, eight hundred of scarlatina, and five hundred of diphtheria. As regards typhoid fever, the most common way in which the poison has been observed in these epidemics to reach the milk is by the soakage of the specific matter of typhoid excrements into the well-water used for washing the milk-cans and for other dairy purposes, and often, it is to be feared, for the dilution of the milk itself—for which, in official reports, "washing the milk-cans" has become a convenient euphemism, advisedly employed to avoid raising unpleasant questions. In twenty-two of the fifty epidemics of typhoid fever recorded this is distinctly stated by the reporters to be the case, and in other cases it was more or less probable. When a dairy is unwholesomely or carelessly kept there is obviously a great variety of ways in which the poison may reach the milk. (Numerous instances of this kind are given.)

Scarlatina being almost invariably spread by contagion and by the inhalation of the bran-like dust which is thrown off from the body during the disease, we should expect in epidemics of milk-scarlatina to receive evidence of this dust having access to the milk; and in the majority of recorded epidemics it was found that persons employed about the dairy operations were in attendance at the same time on persons sick of scarlatina.

In none of the seven recognized outbreaks of diphtheria due to milk has it yet been possible to trace the exciting cause of the outbreak, though as to the disease being spread by milk there could be no doubt whatever. It has indeed been suggested whether a disease of the udder of a cow called "garget" may not so affect the secretion of milk as to give rise to diphtheria in the human subject. So far this notion is a mere conjecture unsupported by fact.

The great majority of the cases give statistical as well as experimental support to the conclusion that the responsibility of the epidemic lay with the milk. It is upon the largest drinkers of the milk (those, namely, who consuming the greatest quantities have a correspondingly greater chance of imbibing disease germs) that the incidence of the

disease chiefly falls. Thus young children (ordinarily little liable to attacks of typhoid) who are accustomed to drink milk largely in the raw state, domestic servants who, after children, drink the most raw milk, and large milk drinkers of every rank and station, furnish by far the largest quota of cases in each epidemic. People, too, who drink exceptionally of the implicated milk are attacked, although the milk taken at their own houses is derived from other sources. The houses invaded during the epidemics are found to be commonly of the better class and in healthy situations. The poor, who take very little milk, and that only in tea or coffee, commonly escape the disease.

The striking fashion in which the disease "picks out" the streets supplied by the implicated dairy, and the houses in those streets receiving the milk, is noteworthy. People in adjacent houses, and who drink milk supplied by different retailers, escape; and when supplies from two sources enter the same house, the disease attacks only those drinking that from the infected source. The contemporaneous invasion of so many households at once can only be explained on the hypothesis of a common cause acting on a particular set of persons and on no others.

ACTION OF PILOCARPINE IN CROUP AFTER TRACHEOTOMY.

In connection with recent cases which demonstrate the good results obtained in diphtheria by the employment of pilocarpine, I have the honor to communicate the report of a case which is a confirmation of it under a new form, and which contributes, in my opinion, to settle briefly the mode of therapeutical action of the medicine.

On Monday, 4th July, I was called in consultation at Kerentrech by my friend Dr. Duliscouet to see young L., six years of age, affected with well marked croup. The situation was so grave that tracheotomy was deemed immediately necessary. We had at hand only one canula a little too large, but it would have taken too much time to have sent for another. Its introduction into the trachea was tedious and difficult: one moment we believed the patient dead. At length after a struggle of fully half an hour we had the happiness of calling him back to life.

Tuesday, 5th—The night had been safely passed. The cleansing of the canula had been intelligently done by the parents. Temperature 39°. I had read the afternoon before the interesting remarks of Dr. Le Reboullet in the *Gazette Hebdomadaire* (May, 1881); I told my colleague of it.

The same evening the respiration having become harsh and embarrassed, M. Duliscouet injected under the skin of the neck 5 milligrammes of chlorhydrate of pilocarpine in a gramme of distilled water. Five minutes after, abundant salivation occurred: a spell of coughing

expelled by the canula a quantity of mucus and false membrane. A perfect calm succeeded and continued during the night.

Wednesday, 6th—The child appeared to be doing well. Temperature $38^{\circ}.2$; respiration easy. The little patient took his food without trouble; he was sitting up playing in his bed.

We nevertheless practiced morning and evening a subcutaneous injection of 5 milligrammes of pilocarpine. Every time after some minutes violent spells of coughing occurred with the expulsion of mucus and false membrane through the canula.

Thursday, 7th—The night had been bad. The child was much troubled and restless; temperature $38^{\circ}.5$, respiration more wheezing and expectoration more difficult. M. Duliscouet, however, seeing no very bad symptom, abstained from making as on the preceding days an injection of pilocarpine. At two in the afternoon the father came in haste for us. We found the child in a state of advanced asphyxia; the look fixed, face pale and livid, lips purple, extremities cold, etc.

Both canula were at once removed. We vainly attempted to extract with a pair of forceps a large piece of false membrane that had appeared in the trachea. The situation seemed desperate. An injection of pilocarpine was given by M. Duliscouet upon the front of the chest. The child was seized with a violent coughing spell and expelled through the tracheal wound a great many pieces of false membrane bathed in mucus. One piece larger than the rest presented the appearance of a bronchial tube and branches. The efforts of coughing lasted thus nearly half an hour, expelling every time pseudo-membranous debris. Gradually the face of the child became colored, showing great relief. At half-past three o'clock everything was doing well.

In the evening another injection of five milligrammes of pilocarpine was followed by the usual good effect.

Friday, 8th—The child had slept perfectly. There was no fever. Expectoration was purely mucus, a little thick but very easy. A last injection was given as a precaution. In the afternoon the canula removed as a trial was entirely removed in the evening. The next day and the following days the larynx became freed at the same time that the tracheal wound closed. From this time on the case proceeded without interruption.

We are convinced (Dr. Duliscouet and myself) that tracheotomy alone would not have saved our little patient, and that the honor of the cure was due to the repeated injections of pilocarpine. It seemed to us from every evidence presented that the beneficial action of pilocarpine is due to the bronchial hypersecretion that it induces and the expulsion of false membrane which obstructs the respiratory tract.—*Journal de Médecine et de Chirurgie.*

POTASSIUM BROMIDE IN ORCHITIS AND INFLAMED BREASTS.

J. Grammer, M.D., says that when consulted in time he finds nothing else necessary either in orchitis or milk-breast but potassium bromide in five-grain doses three times a day, or smaller doses more frequently repeated. In advanced or complicated cases a course of auxiliary measures should be used if only as a precaution or to expedite the cure; but he has never had the bromide to fail him even when used alone. In orchitis a suspensory should always be worn. In some of these cases he has seen the disease held in abeyance for weeks, when the patients would persist in the grossest imprudence in walking and horseback riding. He rarely restricts them in diet. Yet even these cases eventually recovered, without suppuration or atrophy, neither of which results has he seen since he has used this remedy. He has had no opportunity to test it in the metastatic orchitis of mumps, but is sure it will prove as useful here as in the ordinary cases; and though the inflammation is specific he expects to find the remedy efficient in the next epidemic of parotiditis he may meet with.

Dr. Grammer has seen but one case of mammary abscess since he commenced the use of the bromide of potassium for such cases, and that case occurred not long ago. The abscess had already pointed when he first saw it. He opened it and prescribed potassium bromide (two grains) every three hours during the day, and in less than a week her husband reported the patient well. This, however, was not a fair test of the effect of the bromide on a mammary abscess, for there was no infant to complicate or irritate the inflammation. It was to Dr. Grammer a unique instance of the secretion of milk during pregnancy. The woman was four or five months advanced with her fourth child, and she stated that being habitually rather irregular she always recognized her pregnancy by the appearance of milk, the secretion of which thenceforth continued.—*Virginia Med. Monthly.*

SUBSTITUTE FOR CASTOR OIL.

In the *Archivos no Brazil* attention is directed to the oil of anda açu (*Anda Brasiliensis*, Raddi), for which it is claimed that it produces the same effect as castor oil in a less dose; that it has not the disagreeable odor of that oil, and is more fluid, and therefore easier to take. It is given in the doses of 10 grams, which quantity neither produces vomiting nor subsequent intestinal irritation, and is sufficient to produce three or four alvine evacuations. It is stated, however, that before expressing the oil the embryo and the episperm must be removed, as they contain a principle which produces colic. The removal of these parts is not, however, difficult, as the seed is at least ten times larger than that of the castor oil plant.

NEW METHOD OF APPLYING NITRIC ACID AS A CAUSTIC.

W. R. Speirs writes as follows to the *London Practitioner*: The fact that no hint, however simple, should be lost for want of recording, if it be efficacious in practice, must be my excuse for asking you to publish the following account of the treatment of a facial nævus by the application of a strong and fuming nitric acid.

In February, 1880, I was consulted by a lady whose infant, then six months old, had a nævus about the size of a hazel-nut situated on the left cheek, close to the outer canthus. In fact its upper margin encroached so much upon the palpebral surface that it might more properly be described as a nævus of the lower eyelid. It was an ordinary capillary nævus, and almost emptied by compression, but quickly reappeared when the pressure was removed. As it was increasing rapidly in size, the mother was anxious that I should interfere. In deciding upon the plan of treatment to be followed it was necessary to take into consideration the situation of the tumor and the important and delicate structures in its immediate vicinity. It was also desirable that the cicatrix should be as small as possible, and that no contraction of the skin should occur to cause ectropion. The child had already been vaccinated, or I should have been disposed to adopt what I have found a very successful plan with small nævi, namely, vaccinating the tumor. Ligaturing in any form did not seem to be a method of treatment that would be applicable in the present case; and the actual cautery would have been equally inadmissible. The application of a strong caustic, such as nitric acid, seemed most feasible, but the method of using that remedy recommended by Mr. Syme (an account of which was given in Vol. V. of Holmes' Surgery), appeared to me to be too troublesome and too painful, from the length of time it required, to be suitable in the case of so young a child. The following mode, however, proved highly satisfactory, and, besides, was easy of application. I took an ordinary two-ounce vial, selecting one with as wide a mouth as possible. Having broken off the body close to the neck, I inverted the latter over the nævus, pressing the rim of the glass firmly down upon the skin. This had the effect of forcing the tumor well up into the neck of the vial; and when the acid was applied by means of a pipette, it acted freely upon the whole surface of the nævus. Before removing the vial neck I carefully mopped out all excess of acid with some cotton wool on a probe. I then had the satisfaction of beholding a well-defined circular slough, rather depressed, but with clean cut edges as if a punch had been used. The child suffered very little pain, and was easily pacified by being put to the breast. The action of the acid was found to have been entirely confined to the tumor, which was completely obliterated.

No unnecessary loss of tissue took place, and consequently no cicatricial contraction or distortion of the eyelid.

It is now twelve months since the operation was performed, and the scar is scarcely perceptible, only becoming slightly crimson when the child cries.—*St. Louis Med. and Surg. Journal*.

BROMIDE OF SODIUM AND EPILEPSY.

Dr. Hammond's experience has proved the following to be one of the best plans of treatment for epilepsy: Dissolve eight ounces of bromide of sodium in a quart of water. Of this take a teaspoonful three times a day. After three months add one teaspoonful more to the night dose, and after another three or four months add a teaspoonful to the afternoon dose also. At the expiration of a year do the same with the morning dose, and continue with this for a year or more thereafter. If no symptoms of the disease have meanwhile appeared then gradually reduce the doses, and at the expiration of the third year stop. The attacks do not usually return after this course of treatment. Ordinarily, however, patients stop the medicine after a month or two, and in such cases the attacks almost invariably return. It is then almost impossible to bring these patients under the influence of the bromides again. The doses will have to be at least doubled, and this may so derange the system as to make it impossible to take the medicine longer.

CONSTITUTIONAL EFFECT OF CHRYSOPHANIC ACID.

Prof. Charteris (*Lancet*, vol. i., 1881, p. 651) relates the case of a boy nine years of age, admitted to his wards suffering with psoriasis. He was ordered to be rubbed with the chrysophanic acid ointment (one drachm to one ounce of vaseline), and four days later the nurse informed the doctor that the boy had been sick and vomited. Circumstances pointing to the absorption of the acid as a cause of this mishap, the strength of the ointment was reduced one-half, and the little patient recovered from his psoriasis without further untoward symptoms. But the idea was suggested to Prof. Charteris's mind that the acid might have acted constitutionally, and in several cases of psoriasis coming under his care subsequently a portion of the body affected, as an arm or leg, was wrapped up and protected from the action of the ointment which was applied elsewhere. The effect was somewhat surprising, for although the disease did not disappear so rapidly upon the protected portion of the skin, yet it did disappear during the employment of chrysophanic acid inunctions upon an entirely different part of the body.

CHOREA.

[A Discussion in the International Medical Congress, London, 1881.]

On Subcutaneous Nodules connected with Fibrous Structures occurring in Children the subjects of Chorea and Rheumatism. By Thomas Barlow, M.D., F.R.C.P., and Francis Warner, M.D., M.R.C.P.—The nodules described varied in size from that of a mustard seed to that of a bitter almond. They were strictly subcutaneous, the skin over them being simply raised, without any heat, pain, redness, or infiltration, and in most situations they were slightly movable. They occurred in connection with fasciæ and tendons, and especially near joints. The back of the elbow, the malleoli, and the margins of the patella were the commonest sites. Other situations were in the neighborhood of the vertebral spines, the spine of the scapula, the crista ili, the extensor tendons of the foot and hand, the temporal ridge, and the superior curved line of the occiput. They were mostly symmetrical. In regard to minute structure, they consisted of small masses of loose fibrous bundles, sometimes very vascular. These nodules might appear in one crop, or they might appear in succession. The nodules subsided generally within a period of two months; but they might undergo recrudescence. They never became bony, and never became infiltrated with urate of soda. Their evolution was not attended with pain, and rarely with marked pyrexia. Often, during the time when they were present, there was no pyrexia. They had been observed only in children and young adults, the limits being $4\frac{1}{2}$ years and 19 years. In all the cases, it was believed there was heart affection. Thirteen out of the twenty-six cases had well-marked chorea; eight had erythema marginatum, or erythema papulatum; one had purpura in addition. There was a history of acute rheumatism in ten, and of subacute rheumatism with vague joint pains, in eight. It was contended that these subcutaneous nodules might be taken as indicative of rheumatism in children; and that when found associated with heart-disease and chorea, although no history of rheumatic fever could be obtained, their presence gave a presumption that the chorea was rheumatic. In nature, they were probably homologous with the inflammatory exudation which forms the basis of a vegetation on a cardiac valve.

On the Relationship of Chorea to Rheumatism. By Dr. Byers (Belfast).—It was contended that the murmur heard in so many cases of chorea, was generally organic, only occasionally inorganic. The embolic theory would not explain all the cases of chorea, inasmuch as in some there was no history of rheumatism and no evidence of cardiac disease.

Professor Steffen (Stettin) contended that a definite interdependence between chorea and rheumatism was not as yet proved. The relation between

chorea and endocarditis could not be fixed anatomically or pathologically. Probably, the chorea was always the primary morbid phenomenon. The chief symptoms of acute endocarditis were active fever, dilatation of the heart, with enlargement of the area of dullness, a systolic blowing murmur, and an accentuation of the second sound in the area of the pulmonary artery. The dilatation preceded the murmur, if the endocarditis had originally or exclusively attacked the heart-walls. In primary inflammation of the valves, the opposite took place. When an endocarditis, which exclusively involved the heart-walls, receded, the dilatation of the heart disappeared first, and then, gradually, the blowing murmur. If the valves were also attacked, the systolic murmur remained after the dilatation had disappeared. Dilatation and hypertrophy might, afterwards, develop afresh as a secondary process. Acute dilatation of the heart was observed without endocarditis in grave and acute obstruction of the pulmonary circulation, and in septic processes. Cardiac murmurs occurred in chorea without endocarditis. These depended on impaired function of the heart, not only through nervous influence, but also through the obstruction to the circulation of the blood which occurs as a result of the spasmodic movements of the body.

Dr. Octavius Sturges, in a short summary, derived chiefly from cases under his own care, discussed the several modes of the origin of chorea, its modifications at different ages, and particularly that view of the pathology of the affection which seems to be favored by the observation of its heart-symptoms, and of their variations in childhood, adolescence, and adult life.

Dr. Mackenzie arrived at the following conclusions, from an analysis of one hundred and seventy-two cases admitted into the London Hospital during six years: 1. That some cardiac abnormality is present in more than half the cases of chorea. 2. That the cardiac abnormality is due to endocarditis affecting almost exclusively the mitral valve. 3. That in over 80 per cent. of cases the heart-lesion persists. 4. That absence of murmur is no proof of absence of organic heart disease. 5. That rheumatism has pre-existed in nearly half the cases for certain; and that there are strong grounds for believing that it has been an antecedent in a very much larger proportion of cases. 6. That no other very frequent exciting cause of endocarditis is shown to have persisted, or to be more frequent, amongst the non-rheumatic than the rheumatic. 7. That the form of heart-disease met with in chorea is that seen in connection with rheumatism. 8. That rheumatism is in nearly all cases the cause of the heart murmur which so frequently attends chorea. Dr. Ranke (Munich) pointed out the great importance of the study of the geographical distribution of disease; and he thought that future Congresses might do most useful work if general attention were drawn to this matter. In regard to chorea, Professor Ranke was inclined to think that

it was much less frequent in some places than in others. He had lately searched his books, and found that, amongst 40,723 children treated by him in the University Dispensary for sick children, since 1867, there had only been nineteen cases of chorea; amongst these nineteen, only three had presented a systolic murmur; in all the others, the heart-sounds had been normal. Amongst the three cases with mitral trouble, there was only one in which an attack of acute rheumatism had previously occurred. Of the nineteen cases, two followed immediately after fright; in the rest no immediate cause could be discovered. —*Louisville Med. Herald.*

ACONITE IN TONSILLITIS.

Dr. John L. Washington (*St. Louis Courier of Medicine*, 1880, p. 436) says, "I have repeatedly verified what Professor Ringer says respecting the effects of aconite in acute tonsillitis, so that I consider it almost a specific. I give to an adult five drops of the tincture of aconite root at once in a little water, and one-fourth as much every twenty minutes afterwards, until the pulse is reduced to ninety and profuse diaphoresis is produced. Then a similar dose is continued hourly. I give a purgative dose of calomel, unless the bowels are loose, in which case, if the tongue is foul, I give a few half-grain doses instead. Hot poultices are applied to both sides of the throat immediately; and, if the patient is willing to pay me for another visit on the next day, if I find pain and swelling still present, which is usually due to neglect of directions, I paint the tonsils and parts surrounding with a solution of nitrate of silver, thirty grains to the ounce, and give him crystals of chlorate of potassa to dissolve in the mouth, to be afterwards swallowed; also, five drops of the tincture of belladonna and two drops of tincture of aconite root every two hours, a combination strongly recommended by both Bartholow and Ringer. In the case of a young man eighteen years of age, whose throat was almost completely closed from the enormous swelling of both tonsils in an acute attack, causing an extreme degree of dyspnoea, and death by suffocation to appear imminent, by means of ten drops of the tincture of aconite root placed on his tongue, and a hot poultice to each side of his throat externally, I have completely relieved the urgent symptoms in thirty minutes, causing very profuse perspiration, with a grateful sense of comfortable relaxation. I order patients always to remain in bed until several hours of free action of the skin have passed. I have given aconite to pale thin children, with moderately weak pulses, and have always found one-half or two-drop doses in the beginning of the attack, repeated every fifteen or twenty minutes, to bring about copious sweating and speedy diminution of the swelling, and have never seen any unpleasant symptom from its use in this manner. If the patient has been, on

account of painful or perhaps impossible deglutition, ten or twelve hours without proper nourishment, I order an enema of beef-essence."

CEMENT FOR MENDING GLASS, EARTH-EN AND WEDGEWOOD WARE.

Take one ounce of Russian isinglass, cut it in small pieces, and bruise well in order to separate the fibres; then add six ounces of warm water, and leave it in a warm place, that the isinglass may dissolve, which will require from twenty-four to forty-eight hours. Evaporate this to about three ounces. Next dissolve one half ounce of mastic in one ounce of alcohol; and when this is ready transfer the isinglass from the evaporating dish to a tin can (an empty ether can will be found convenient); heat both solutions, and add the mastic solution to the isinglass in small quantities at a time, shaking the can violently after each addition. While still hot strain the liquid through muslin cloth, and put up in half-ounce bottles. I have found this cement to be very valuable, and articles—such as mortars, graduates, etc.—mended by it have been in use for years, and in fact seem to be stronger than they were originally.

BULLET IN THE BRAIN FOR SIXTY-FIVE YEARS.

Robert Elliot, of Carlisle, reports the case of a soldier who was shot in the left eye at the battle of Waterloo in the month of June. He fell and was reported dead by the man who stood next him when the wound was received. However, he rejoined the regiment at Paris, and being unfit for duty was sent to England. Dr. Elliot saw him for the first time thirty-three years after the wound was received, and after careful examination could find no evidence that the ball, which was said to have entered the left orbit, had made its exit from the cranium. Moreover, the man described sensations in the lower back part of the head which could be accounted for only on the supposition of the presence of a foreign body. This man died October 10th, 1880, sixty-five years after the bullet was lodged in his brain.—*Edinburgh Med. Jour.*, Dec., 1880.

INJECTION BROU.

The following is given by the *Medical Record* as formula for its famed gonorrhoea injection: sulphate of zinc, eight grains; acetate of lead, fifteen grains; tincture of catechu, two drachms; aqueous tincture of opium, three ounces. The formula of the aqueous tincture of opium is known to but few pharmacists, and it is, therefore, not easily obtained. It is, however, not impossible that a dilution of tincture of opium would answer all purposes.

BROMIDE OF POTASSIUM IN INFANTILE DENTITION.

M. Peyraud recommends this drug for relief to the painful and troublesome processes of infantile dentition, and employs the following prescription: Bromide of potassium, 2-3 grams; honey, 15-20 grams; water, q. s. After the solution has taken place, heat and evaporate to a consistency of honey, adding alcohol to preserve the mixture. By rubbing this on inflamed gums the mucous membrane is attacked and denuded, the hyperemic circulation is diminished, the inflammation reduced, and the projecting points of the teeth will gradually pierce the gum, and the contemporaneous inflammation of the mouth will be subdued.

The internal use of this drug will likewise, in the author's experience, prevent or abate the convulsions incidental to teething infants. He also recommends the use of the bromide in dental caries, which it arrests, and acts as a substitute for the arsenical preparations commonly used by dentists. Into a little cyst of the eyelid M. Peyraud injected subcutaneously a strong solution of the bromide, which was followed by the complete disappearance of the cystic tumor.

M. Joffroy, basing his treatment on the ground that there is a hypersensibility of the mucous membrane of the larynx in the so-called spasm of the glottis after diphtheria, employed bromide of potassium in daily amounts of two grams to overcome this hyperesthesia. In two cases where asphyxia was threatened after tracheotomy had been performed, the spasm appeared controlled by the bromide, and death apparently was averted. He cautions against the use of this agent where there are complications of bronchitis or threatening paralysis of the glotto-pharyngeal and laryngeal muscles.—*Boston Med. and Surg. Journal*.

A NEW REMEDY IN DIPHTHERIA.

Dr. George Guttman, of Constadt, says, "Knowledge of the physiological action of pilocarpin and its effect upon bronchial catarrh, giving rise to moist râles, led me to believe that, administered in diphtheria, it might lessen the diphtheritic membrane through the induced abundant salivary secretion, while it would not excite any inflammatory condition. The result of the proposed treatment was above all expectation brilliant and striking. In six cases pilocarpin was administered with cure of the patients in two to four days. In addition the usual general treatment was followed: quinine, tannin locally, gargles of lime-water, and pepsin. The patients recovered in from two to four days.

"Led by these results, I prescribed pilocarpin in violent pharyngeal cases, angina aphthosa and tonsillaris, always with most happy results, the disease yielding in a short time. In two cases of violent tonsillitis, in which the tonsils were so swollen that water could be taken only with great difficulty, and scarification was positively indicated, not

only did the swelling disappear, but the entire group of inflammatory symptoms, the one in twenty-four hours and the other in thirty-six.

"In the few cases of membranous croup that have fallen into my hands during the past fifteen months, pilocarpin has proved a faithful ally, and I believe it will prove as effective as in diphtheria of the fauces.

"Two cases of laryngitis stridula yielded promptly to the same drug, which is safer and more convenient than the usually prescribed emetic."

The formulæ employed by Dr. Guttman are as follows:

R Pilocarpin. muriat., gr. 1-3— $\frac{2}{3}$;
Pepsin., gr. x ad xii;
Acidi hydrochlor., gtt. ii;
Aque dest., $\frac{3}{4}$ iii.

M. Sig.—A teaspoonful hourly for children.

For adults:

Pilocarpin. muriat., gr. $\frac{1}{2}$ — $\frac{3}{4}$;
Pepsin., gr. xxx;
Acidi hydrochlor., gtt. iii;
Aque dest., $\frac{3}{4}$ viii.

S.—Hourly, a tablespoonful.

He has never observed any undesirable effects of the drug, even when it has been continued until complete recovery, possibly because a small amount of generous wine is given after each dose.—*Berlin Klin. Woch.*, October 4, 1880.

THE CANADA MEDICAL RECORD,

Monthly Journal of Medicine and Pharmacy

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MONTREAL, FEBRUARY, 1882.

NINTH ANNUAL REPORT OF THE WOMAN'S HOSPITAL OF MONTREAL.

The Committee of Management of the Woman's Hospital of this city, representing the Corporation, beg to submit this, the 9th Annual Report.

In the report of last year, the history of the removal of the Hospital to the present building was given, the details of the difficulties encountered, and the manner in which they were overcome related. The same staunch friends who then came to the assistance of the Institution have still

remained members of the Corporation, and have given all the assistance in their power; indeed, without this assistance, the Hospital would very seriously suffer. It is gratifying to state that the amount of benefit bestowed upon the poorer classes of females in this city for the last year far surpasses that of any year since the foundation of the Institution. In each department the number of patients has increased. Some of these patients have come from outside of the city, a few of them having their expenses paid by the municipalities where they resided. This is a substantial proof that the excellence of the Hospital is now becoming well-known and appreciated outside of the city, as well as in it.

In the spring, the work had increased to such an extent, it was found impossible for the Matron to attend efficiently to all, so that your Committee, in conjunction with the Medical Board, appointed a resident clinical assistant, who assumed the medical supervision of the patients.

It was decided that this appointment should be made by examination, and that no salary should be attached to it. An examination was accordingly held, when Mr. N. C. Smillie proved himself in every way capable for the position. In the autumn Mr. Smillie found it necessary to resign, as other duties interfered with his work in the Hospital, and Mr. Fred. White, a gentleman equally able, has now the position, and has given satisfaction to all.

Your Committee, last year, on account of the want of funds were enabled to allow of the occupation of only twenty beds, but during the year now closed an extra number were gradually added, until at the present time there are thirty-two in use.

It was supposed, on account of the distance from the city, that our out-door department would show a lessened attendance, but, on the contrary, it has increased, and very seldom either in good or bad weather is there no one asking for advice.

That this is the case, is greatly due to the punctuality of the medical attendants, so that patients who, as they frequently do, come from the far east of the city, are always sure of finding the physician at the hour appointed.

Your Committee announce with pleasure the fact they are indebted to many kind friends, notably to the Social and Dramatic Club of this city, who so kindly gave us the entertainment in the Academy last winter. Its success is well-

known to you all, and the handsome sum of \$630 was realized by it.

Thanks are also due to the Rev. Mr. Hall for his exertions in securing the foundation of a Hospital library. The patients have not yet been able to fully utilize the reading material, as we have unfortunately no book-case, and most of the books are stored away so that they may not be lost.

The Institution is also under obligation to many friends who have donated articles in kind, the aggregate value of which amounts to several hundred dollars.

The Ladies Committee has not been behind in its assistance, and our thanks are due to its members for their kind co-operation.

We have also to thank the Provincial Government for the annual grant of \$500, which sum, although not yet forwarded to us, we daily expect to receive.

Your Committee have great pleasure in stating that the reputation of the Hospital is greatly due to the earnest and active manner in which the Medical Staff, the Matron, and the other officials have performed their respective duties, and it is confidently hoped that, as so much has been done in such a short time since the re-organization of the Institution, more will yet be accomplished in the future, and the Woman's Hospital become known as one of the leading medical charities of the Dominion.

Total number of patients treated during the year of 1881, 467.

Out-door department.....	288
Surgical do	61
Obstetrical do	94
Private patients.....	24

467

Protestants.....	305
R. Catholics.....	162

467

Deaths during the year.....	5
Confinements during the year.....	94
Single women.....	74
Married "	20

94

Patients remaining in Hospital on Dec. 31, 1881.....	15
Obstetrical department.....	6
Surgical "	6
Private patients,.....	3

15

JAMES PERRIGO, M.D., *Secretary.*

ANEURISM CURED BY LARGE DOSES OF IODIDE OF POTASSIUM.

Recently a patient was presented to the Medical Society of Brooklyn, N.Y., by Dr. Kretzschmar who had been cured of a large thoracic aneurism by the use of potassium iodide. The case is remarkable from the large doses of the remedy administered, and which was given in enormous quantity without perceptibly injuring the general system.

The patient was a powerful man, a shipsmith by trade, with no history of syphilis. His symptoms first appeared early in 1880, but he did not seek medical aid until February, 1881, when the diagnosis of aneurism of the ascending arch was made, and this was confirmed by others, so that no doubt existed as to the condition. In April he was brought before the medical class of Long Island College Hospital by Prof. Armor, and all agreed in giving a grave prognosis. Iodide of potassium had been given previously in 10 grain doses four times a day, but from this time, April 20, the following treatment was carried out: to lie down all the time, a light diet with little meat, and to abstain from fluids as much as possible. In addition sixty grains of iodide was given every six hours, amounting to 240 grains daily; constant but moderate pressure was also made use of. After two weeks the dose was increased to 360 grains daily. By this time the tumor seemed to become smaller, and all the distressing symptoms greatly relieved. As there was a continued tolerance of the drug, the dose was increased on May 17th to 480 grains daily. Under these enormous doses the tumor gradually decreased. The patient gained strength, and was soon able to be about. On June 1st the patient obtained one pound of iodide which lasted him 12 days, equal to 600 grains daily. After this he was advised to diminish the dose to 200 grains daily, as an examination showed almost complete disappearance of the tumor. Shortly afterwards the man resumed his former occupation, which requires great physical strength and exertion, as he has to swing a large hammer. We have considered this case to be so remarkable as to make the above abstract, and it seems almost incredible that such an excellent result could be obtained, or that a patient could escape the specific effects of iodism. It certainly shows a degree of tolerance seldom experienced, but at the same time is an illustration of the beneficial action of potassium iodide in aneurism.

THE ILLUSTRATED QUARTERLY OF MEDICINE AND SURGERY.

By the kindness of the Publisher's representative, we have been shown an advance copy of the above quarterly, which is to be published in New York by E. B. Treat, and edited by Dr. George Henry Fox and Dr. Frederic R. Sturgis. It certainly promises a new feature in Medical Journalism, and as the venture is a bold one, we hope that those who can afford it will give this new candidate for public favor their support. The first number contains over twenty illustrations, some of them chromos, others colored photographs, and exquisite wood engravings, while the articles which they illustrate are from the pen of such well-known men as Alfred C. Post, Willard Parker, T. Gaillard Thomas and others. Each number of the *Quarterly* will consist of four quarto plates printed on fine quality of cardboard 10 x 12 inches, with twenty-four or more quarto pages of accompanying text. The price of subscription is \$7.00 a year if paid in advance, or \$8.00 in quarterly payments. When the exquisite and exceptional character of the work is considered, the rates are moderate.

SURGICAL TRIUMPHS.

Professor Nussbaum has just published a very interesting address, delivered on the Anniversary of the hundredth birthday of Philipp Franz Von Walther, who was born in 1782, and died in 1849; after an account of his life and work. Nussbaum makes a rapid survey of progress since Walther's day. Anæsthetics, antiseptics and bloodless operations, are all advanced as surgical triumphs. Of Ovariectomy, he says, "about 40,000 years of life have been already been gained for women by successful ovariectomies;" and he believes that lives will be saved and much suffering prevented by Hegar's operation of removing the ovaries to anticipate the climacteric age in women the subjects of bleeding uterine fibroids. The cure of reflex epilepsy by nerve-stretching he regards as a great advance in therapeutics. Excision of a kidney or of the spleen, of parts of a cancerous bladder or prostate, of the rectum and of the pylorus, he also regards with confident hope of improving results; and he believes it "not quite impossible that diseased portions of lung may be successfully excised." Our German colleagues are certainly not behind us in courage and adventure.—*Brit. Med. Journal.*

THE DURATION OF HUMAN LIFE IN ENGLAND.

Dr. Rabagliati of the Bradford Infirmary has written a series of articles to the *British Medical Journal* upon the question, "Has the duration of human life in England increased during the last thirty years?" His conclusions are: (1) that there has been an increase, on the average, to human life, which is entirely attributable to the better management and prevention of fevers; (2) that if the deaths from fevers be deducted, the present rate of mortality is higher than it was thirty years ago; (3) that if the mortality among children and young persons has diminished, the mortality among males above thirty-five, and females above forty-five years of age, has markedly increased; (4) that the main causes of the increased adult mortality are worry and anxiety, affecting chiefly the nervous system, heart, and kidneys. The mortality from diseases of the nervous system, has increased twenty-five per cent. in thirty years; that from diseases of the circulation 50 per cent.; that from diseases of the kidneys 148 per cent. Such a great increase in adult mortality is significant, notwithstanding the better results obtained in the treatment of many diseases and the great improvements in operative Surgery which have immensely increased the length of human life.

HYPODERMIC INJECTIONS OF FOWLER'S SOLUTION IN THE TREATMENT OF CHOREA.

This method of treatment has proved very efficacious in the hands of Dr. Edward C. Mann, of New York, who, in the July number of the *Alienist and Neurologist*, publishes an article on the nature, pathology and treatment of this affection. In order to avoid any local irritation he uses a mixture of equal parts of Fowler's solution and water. Very rapid improvement generally takes place under this treatment from the first, and the patients gain flesh. He commences with three minims, and injects, subcutaneously, for a week, every other day, and on the second week increases the dose to five minims every other day, increasing two minims each week, and in from one to two months a cure is obtained. In recent cases a month or six weeks will generally suffice, while in old cases sixty or seventy days may elapse before a cure is accomplished. In troublesome cases he also uses, as

adjuvants, ether spray or ice bags to the spine, and electricity. By this method of using Fowler's solution the gastric disturbances which are produced when the medicine is given by the stomach are avoided, and the good effects which we can obtain are very much more rapid.

CONSULTATIONS WITH HOMŒOPATHS IN ENGLAND.

The Royal College of Physicians of London have recently adopted the following resolution unanimously:

"While the college has no desire to fetter the opinion of its members in reference to any theories they may see fit to adopt in connection with the practice of medicine, it nevertheless considers it desirable to express its opinion, that the assumption or acceptance by members of the profession of designations implying the adoption of special modes of treatment, is opposed to those principles of the freedom and dignity of the profession, which should govern the relations of its members to each other and to the public. The College, therefore, expects that all its fellows, members and licentiates will uphold these principles by discountenancing those who trade upon such designations."—*Brit. Med. Journal*.

INTERNATIONAL MEDICAL CONGRESS.

It has been decided that the next International Medical Congress will be held in Copenhagen in 1884.

PROFESSOR CHARCOT.

The Faculty of Medicine of Paris have appointed Prof. Charcot to the recently established chair of Nervous Diseases. The chair of Pathological Anatomy is consequently vacant.

THE POPULATION OF PARIS.

The census taken on the 18th of December makes the total population of Paris 2,225,900. In 1876 it was 1,851,792. The increase is chiefly in the outlying industrial districts.

HOSPITAL NOTES.

Montreal General Hospital.—On the night of the 8th inst. a case of cut-throat was admitted. The patient, a man of forty, while in a fit of despondency, attempted suicide by cutting his throat with a razor. He stood before a looking-glass and inflicted a wound in the front of the neck, almost vertical in direction; it extended from half an inch above the thyroid cartilage downwards for about two and a half inches, dividing the thyroid with its membrane and the cricoid cartilage. Through this gaping wound, the posterior wall of the larynx could be seen. Before cutting his throat, he made a gash two inches in length across his left wrist, but did not succeed in dividing any important vessel. The hemorrhage from the wound in the neck was at first considerable, but had ceased before his admission into hospital two hours after the injury. The edges of the wound were brought together with catgut sutures, a drainage tube was inserted at the lower angle, and ice applied as a dressing. The following day the wound was dressed antiseptically, and so far no unfavorable symptoms have developed. It appears that the patient's father committed suicide some twenty years ago, by hanging himself.

On the 4th inst. Dr. Roddick performed re-amputation of the leg at the junction of the middle and upper third, for the cure of a painful stump. The patient's leg was crushed in a railroad accident three years ago, and was amputated at St. Louis. For re-amputation the operation selected was a modification of Mr. Teale's, a long anterior and short posterior flap; strict antiseptic precautions were used, and the case did well, the temperature never exceeding 99.4°.

The Woman's Hospital.—The Annual Report of the Woman's Hospital appears in another column. A brief review of the year's work will give our readers, especially those residing in the country districts, some idea of the character and work of this excellent institution. It has just completed its ninth year, and since its foundation has steadily increased in size and importance, till it has become one of the leading charities of Montreal. In 1881 a much larger number of patients have received relief than in any year previously. The Hospital is divided into four distinct departments: the *obstetrical*, the *gynecological*, the *private wards* (eight in number), and the *out-door dispensary*. All these are kept rigidly separate, no intercommunication of patients being allowed between them.

Gynecological department.—A number of interesting cases were treated during the year, a few of which are worthy of special note. In a series of operations for lacerated cervix uteri, the relative merits of iron wire and pure silver wire were compared; pure silver wire of medium size was found to be decidedly preferable. In some cases the sutures were twisted, in others they were clamped with perforated shot. Good results were obtained with the twisted suture; but, on the whole, the perforated shot seemed easier of application, and there was less difficulty experienced in bringing the edges fairly together, the union was more rapid, and the cicatrix more even. Two points were well brought out by this series of cases:—

1st. That the sutures should not be twisted or clamped *too tightly*. Only sufficient force should be used to keep the edges of the wound in easy contact; if pulled too tight, the sutures may either cut through or else bury themselves deep in the uterine tissue and be difficult to remove. In either case, an amount of new cicatricial tissue will be formed which will seriously impair the success of the operation.

2nd. The less traction that is made upon the uterus during the operation, the more rapid and satisfactory will be the recovery. The violent pulling down of the uterus to the vaginal outlet certainly facilitates the operation, but in the interests of the patient it is bad practice.

A tourniquet was not required to control the hemorrhage; a vaginal douche of very hot water just before the operation was found sufficient to prevent much bleeding.

There was one case of *scirrhous of the breast*, with implication of the axillary glands. The breast was removed, together with all diseased and doubtful glands; the patient made a rapid recovery, but returned four months after her discharge from hospital, with a recurrence of the disease in the liver. That organ was of immense size, occupying nearly two-thirds of the abdominal cavity. Such rapid growth in so short a time would seem to indicate that the liver was already implicated at the time of operation, although no symptoms could then be made out.

Only one case of *cancer of the uterus* was under treatment. It was of the epithelial variety, occupying nearly one-half of the external os, and the mucous membrane lining the cervix. The diseased mass was scraped away with a curette, and chromic acid freely applied. This application was

repeated three times at intervals of ten days, the vagina being meanwhile washed out thoroughly with Condyl's fluid twice a day. At the present time, ten months since the treatment, there are no signs of return, and the uterus presents a normal appearance.

A case of pelvic hæmatocele, the result of an attempted abortion, presents some points of interest. The patient was admitted Nov. 29th with a history of having taken a considerable quantity of *oil of cedar* with the view of procuring an abortion. The dose taken was three drops, gradually increased at short intervals till a maximum of fifteen was reached. The immediate effect was severe pain, at first resembling labor pains, but shortly becoming more intense and locating itself directly over the uterus. The patient was presumably only six or seven weeks pregnant; whether she really aborted or not is a matter of doubt. On admission, she presented the following symptoms:—face pale and anxious, nose pinched, lips blue, breathing hurried, pulse 115 and small, temp. 102°, marked tenderness over the uterus, and a slight reddish discharge from the vagina. A digital examination per vaginam revealed nothing special, beyond the fact that the os uteri was very painful to the touch. The treatment ordered was: Pulv. opii gr. ss. every four hours, hot linseed meal poultices to the abdomen, and a hot vaginal douche four times a day. By the 5th December, six days after admission, the pain had greatly abated, but the abdomen had become distended to the size of a fifth month pregnancy, and there was marked dullness on percussion over the hypogastric and both iliac regions. The vaginal discharge had ceased, and digital examination revealed a decided bulging in Douglas' pouch; the temp. was 103.6°, and the pulse 118. On 8th December, the dullness on percussion extended as high as the umbilicus; the vagina was nearly obliterated by the distention of Douglas' pouch, and felt like the arch of a small diaphragm, through the centre of which the os protruded like a nipple. The temperature and pulse still continued high. On the evening of the 12th December, the hæmatocele burst into the rectum and discharged half a chamberfull of pus and blood. The next morning several smaller discharges took place, the temperature fell at once to the normal, the abdominal tumor rapidly subsided, and the general health began to improve. She was put upon tinct. fer. mur., and convalesced

so rapidly that on the 31st December she was able to leave hospital.

There were several cases of anal fissure treated by forcible dilatation of the sphincter, the results being entirely satisfactory. In one case of hemorrhoids, Pacquelin's thermo-cautère was employed with admirable results.

There were five deaths in the Institution during the year; one from cancer of the liver (already referred to); one from tubercular peritonitis; one from gastric ulcer; two from pelvic cellulitis.

Obstetrical Department.—The special cases are as follows:—*Twins* occurred three times; in two cases the sacs were separate; in the third case both children were enclosed in the same sac, and were attached to the same placenta by two separate cords. In two cases the children were males; in the third, one was a male, the other a female. In one case the breech and vertex presented; the others were all vertex presentations. In one case the labor was powerless, necessitating the use of forceps; the children were males, weighing 7½ and 8 lbs. respectively; the extraction of the second child caused a severe perineal laceration, which was successfully closed with silver sutures; a phlegmasia dolens of the left leg followed, but eventually the patient made a good recovery.

Breech presentation occurred three times, one being a twin.

Prolapse of the Funis occurred twice. In the first case postural treatment succeeded in replacing the cord; in the other it failed, and forceps had to be applied to save the child. In both cases the children were born alive.

Forceps were used altogether nine times. In three cases they were applied at the brim; in the first there was too early escape of the liquor amnii, with great rigidity and dryness of the tissues; in the second there was prolapse of the funis; in the third there was narrowing of the antero-posterior diameter. In the remaining six cases forceps were employed, chiefly for prolonged and powerless labor. Chloroform was administered in all cases of instrumental delivery. After an extended comparison of various kinds of forceps, Barnes' instrument has been adopted as the most serviceable and satisfactory.

Adherent placenta occurred in one case, necessitating the introduction of the hand for its extraction.

Post partum hemorrhage, severe in character,

occurred six times; twice after forceps, attributable to profound anæsthesia. Ergot was given in all the cases; in two ice was applied externally over the uterus. All made good recoveries.

Active mania developed in one case. In her delirium she jumped out of bed, and walked across the cold floor in her bare feet; a severe pelvic cellulitis was the result, suppuration set in, and she died exhausted six weeks after confinement, the maniacal condition persisting unabated to the very end. Like many other patients in this department, she was in a low state of health on admission, and was suffering from considerable mental depression. This was the only death in the obstetrical department during the year; with the exception of a few cases of cellulitis following labor, all the other patients made a rapid convalescence.

Of the *children*, three died some time prior to confinement, two died shortly after, one from obstruction of the colon, the other from rupture of the spine bifida. Nearly all the children were sent to the Foundling Hospital.

The strictest antiseptic precautions are carried out in the treatment of all obstetric cases. Each ward is periodically vacated, and then thoroughly cleansed and fumigated. The beds are of straw, and are renewed frequently. In giving the vaginal douche, a new syringe is used for each patient; and as far as possible everything is done to obviate the dangers which arise from the congregation of lying-in cases.

REVIEWS.

The Opium Habit and Alcoholism. By DR. FRED. HEMAN HUBBARD. A. S. Barnes & Co., New York.

The medical man who reads this work will do so with very mixed feelings. He must acknowledge that the author has a practical knowledge of the subjects under discussion, and yet upon almost every page there are indications that he lacks the literary acquirements necessary to present his views in a readable manner. Even this failing might be overlooked in view of the valuable hints and suggestions to be found throughout his book if he did not persist in introducing subjects but faintly suggestive of the title page.

To speak of the deleterious effects of opium, alcohol, Indian hemp, etc., and to furnish an account of cases illustrative of his methods of treatment, is

Dr. Hubbard's safe path to the respect and thanks of his Medical audience, but when he gives a long, unconnected lecture on the pathology, causes and treatment of neuralgia (pages 128-135), one cannot help drawing a comparison between Anstie's monograph and Dr. Hubbard's efforts not at all favorable to the latter. Similarly with the subject of dyspepsia. No less than twenty-six pages (pp. 210-236) are devoted to the causes, pathology, treatment, etc., of various forms of indigestion. Even if the subject were properly and carefully handled (and we cannot conceal the fact that it is not), it would be altogether out of place in a book of this kind. Should the work ever reach a second edition, and for the sake of the many good things in it we hope it may, it would certainly add to its attractiveness if the dyspeptic part were omitted. If that cannot be done, the author might profitably consult Habershon on Diseases of the Stomach before re-writing it.

Just as far as an author strays from a subject that he is familiar with and treats of other matters of which he knows but very little, just to that extent is he in danger of making himself ridiculous, and when we are informed in the little essay on the *tænia solium* (page 231) that the term "pruritus" is synonymous with "itching of the nose," and that (page 161) "according to the nomenclature adopted by the profession the term alcohol includes all beverages containing alcohol," or when he speaks of (page 150) "a profuse secretion from the Schneiderian membranes lining the nasal fossæ," or (page 134) of "inhaling the steam from pot. nit," or when he asserts on page 166 that fifteen drops of extract of ipecac will vomit the patient freely," we cannot help harboring the suspicion that Dr. Hubbard has but a very hazy idea of what he is talking about.

We are aware that there is a certain looseness about the "prescription" style of many American authors which does not furnish a proper index of the value to be placed on the works in which it may be detected, but, making all allowance for that fact, surely such formulæ as the following are unpardonable "in a book written for professional men":

R	Iodide lime.....	gr x
	Phosphate iron.....	3 j
	Quinine.....	3
	Lactopeptine.....	3 ij
	Syrup simple.....	3 v

M

The following :

R Salicylic acid.....	gr v
Glycerine	$\frac{3}{4}$ ij
Aqua.....	$\frac{3}{4}$ ij

M. Sig. Was used once every two weeks before retiring, etc.

The introduction of "Sig." is very good and quite unique!

But these defects should not blind us to what is good in Dr. Hubbard's book, and the profession will coincide with all that he says about the pernicious effects of soothing syrups, cough syrups, paregoric and other narcotic preparations upon infant life, and even more heartily do we endorse his references to inebriate asylums, and the many sanatoria that fill the land.

Buried in a collection of well-meaning, though ill-assorted matter, the medical reader will find many valuable pieces of information, and will read much that will both interest and instruct him. It is, therefore, with the best wishes for this venture of his that we would say to the author;—leave out your essays on extrinsic subjects; confine yourself entirely to the promise of the title page; do not lay the blame of avoidable mistakes upon a "general growing practice;" have the purely literary part revised by some competent person, and the essentially technical portion gone over by some qualified medical friend, and be sure your publisher's statement that your book contains "directions so clear and simple that patients may treat their own cases," and that "the book should go not only into the hands of the medical fraternity but should be read by the people of whatever estate in all sections of the country," does not belie your prefatory contract that "in writing this memoir, the author has kept one object steadily in view; he has sought to make his work useful, and to place *in the hands of the profession* a carefully arranged analysis, etc." With these changes Dr. Hubbard's work will have a place in the estimation of the profession which in its present form it cannot hope to assume.

A Practical Treatise on Hernia. By JOSEPH H. WARREN, M.D. Second and Revised Edition. Fully illustrated. Boston: James R. Osgood & Co. London: Sampson Low, Marston, Searle and Rivington. 1882.

This is a practical monograph upon a most important subject, which ordinarily receives but

scant and imperfect notice in systematic works upon surgery. While the specialist will see much that will interest him in this book, it will prove especially serviceable to the busy general practitioner, who will here find a tolerably complete and reliable description of Hernia, its causes, symptoms, varieties and surgical anatomy, followed by a history of the various operations recommended for its cure, and a discussion of their respective merits. The author specially advocates his own operation, which is a modification of the late Dr. Heaton's, viz.: the injection of the hernial rings with an aseptic astringent fluid. He claims both safety and success for his operation, and reports one hundred and fifty cases; of these only twelve were unsuccessful, and none fatal. Chapters are given upon wounds of the intestines and artificial anus, varicocele and hydrocele, and one upon trusses. The book is well printed, and the illustrations all exceptionally good. We can heartily recommend it to our readers as being the most recent, complete, and practical treatise upon the subject.

Memoranda of Physiology. By HENRY ASHBY, M.D. Third Edition, thoroughly revised. New York, Wm. Wood & Co., 1882.

This is a little pocket work contains much useful information, condensed into a small space. As its name implies, it is intended to bring before the reader the salient points of this important subject, and will be found of great use to the student, as it will enable him to briefly review this study prior to examinations. The fact that it has been found necessary to publish a third edition is proof of its usefulness, and that it has already gained a place in the esteem of those for whom it was designed.

A Study of the Tumors of the Bladder. By ALEX. W. STEIN, M.D. William Wood & Co., New York. Dawson Bros., Montreal.

This treatise tells us more of the tumors of the bladder than is generally found in most text-books. The author was able to keep under observation two cases until the end, and was then fortunate enough to obtain autopsies in each. The details of these two cases are given, which adds greatly to the value of the monograph. The work is thoroughly practical, and cannot fail to be of interest to those having much genito-urinary surgery to attend to.

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Original Communications.

MEDICAL PRACTICE IN BRITISH GUIANA.

By

J. ENEAS, C.M., M.D., District Medical Officer, Wakenam, Demerara.

In the Colony of British Guiana there are about forty Medical practitioners; of these twenty-six are Medical Officers in the Immigration Department, a chief Medical Officer, twenty-two permanently appointed to rural districts, and three supernumeraries who may be called upon to fill vacancies that may occur in the districts from sickness, death or other causes, but, when not employed in the districts, they are attending the Colonial Hospital; there are, however, generally three or four district Medical Officers away on leave all through the year; there are nine Medical Officers in the Colonial Hospital, Lunatic Asylum, Alms House, Penal Settlement and as Port Officer, the others are private practitioners in Georgetown, the metropolis of the Colony. All Medical Officers except the resident surgeons in the Colonial Hospitals and Lunatic Asylum are allowed to attend to private practice, but which, however, is not of much importance in many of the rural districts. The salaries in the rural districts range from £500 to £1000, but the expense of living is very high, consequently one does not save as

much as may be imagined out of these amounts, particularly in the districts to which the smaller salaries are attached, as generally in the latter there is the least private practice. There is, however, this advantage in connection with the public service in that Colony, one can retire after ten years service if at the age of fifty-five, or if from bodily illness he is unable to continue more than ten years in the service of the Colony, the retiring allowance being one-fiftieth of the salary received for every year that one has been in the service up to the thirty-five years. It is, however, very rare that any one reaches that number of years. One Medical Officer retired three years ago after a service of thirty-three years, and with a retiring allowance of over three thousand dollars per annum. The Medical Officer is allowed a reasonable leave of absence every six years, and oftener if his health requires it. Again, it being compulsory to pay into the Widows' and Orphans' Fund at the rate of four per cent. of the salary, one's widow and children are sure of a fair pension at his death, even if he should die within the first year of his entry into the service. His retiring from the service after ten or more years will not affect his widow's pension, providing four per cent. of the retiring allowance, which is optional, is regularly paid in.

These appointments are generally made by the Secretary of State for the Colonies direct, but in some instances the Governor appoints and then

recommends the party to the Secretary, who almost invariably confirms the appointment. If possible, however, it is far better to get a direct appointment, which in the case of Medical Officers on the Immigration staff is always a supernumerary office at a salary of three hundred pounds. Changes are so frequently occurring that an appointment to a district soon follows.

The duty of the district Medical Officer is to attend to all Estate Hospitals at stated intervals, or oftener if necessary, and the police and recognized paupers in the district when required. He is also to attend all Criminal Courts when subpoenaed without compensation except his travelling expenses. He has to make all post mortem examinations when ordered by a coroner, but for that he receives a fee of ten dollars. He also receives a fee of five dollars for giving evidence at the coroner's inquest.

The number of Estate Hospitals in the several districts vary from one to eight, and in some districts they are several miles apart, consequently a large portion of his time is spent in going to and from the hospitals, which adds very materially to his expenses in the way of horseflesh and waggons. These hospitals are certified to accommodate from thirty to eighty patients each, but generally there are not more than half that number in them; occasionally, however, they are full, and sometimes even have more than the certified number.

The patients are chiefly Coolies, or East Indians, laborers on the estates, numbering from two hundred to two thousand on each estate or plantation, indentured and free. The former are entitled to all the privileges of the hospitals, according to the immigration ordinance, and the latter only when they get an order from the manager or other estate official, and this is invariably given when asked for while working on the plantation. The names of the patients are entered on the daily case book by the head sick nurse before or on the arrival of the Medical Officer, and he then makes them in or out patients as he thinks best, except in the case of those who have not been a year in the Colony, when it is specially requested that they be made in-door patients.

In the year 1880 there were treated in the Estate Hospitals throughout the Colony, (in all about one hundred,) 105,552 patients, of whom 1480 or 1.4 per cent. died. Of these patients 73,744 were indentured East Indians or Coolies, that is those who had not been in the Colony five years. Of

the remainder, all of whom were free laborers, there were 24,761 East Indians, 1023 Chinese, 4018 Creoles, 992 Barbadians, 734 Portuguese, 162 Africans, 49 Europeans and 63 other nationalities. Of the whole number 70,410 were treated as in-door patients, of whom 1407 or 20.05 per thousand died, and 35,142 as out-door patients, of whom 73 or 2.09 per thousand died. 181 cases were admitted into the hospitals in a moribund condition, and died on the day of admission, and of these 71 were children. Of the 70,410 patients treated in-doors, 53,745 were adults with 486 or .815 per cent. deaths, and 2454 children under ten years with 65 or 2.63 per cent. deaths. In all 56,199 indentured, with 551 or 98 per cent. deaths, and 14,211 free laborers, with 856 or 6 per cent. deaths. The great difference between the number of deaths in the indentured and free laborers shows the advantage of the supervision by the estates officials over the former class. On the first sign of illness they are ordered to the hospitals, and are compelled to go, whereas the latter class only go to the hospitals whenever they feel inclined, as they are not compelled. Of the whole number treated as in and out-door patients, the rate of deaths in the several nationalities were: of East Indians, 1.27 p.c.; Chinese, 4.1 p.c.; Creoles, 2.7 p.c.; Barbadians, 2.9 p.c.; Portuguese, 2.4 p.c.; Africa, 9.2 p.c.; Europeans, 6.1 p.c.; other nationalities, 11.01 p.c.

The larger portion of those admitted in a moribund condition were free laborers. The number of those who died within the first year of their residence in the colony, or period of acclimation, were 173, or 11 per cent. of all the deaths, and of this number 21 were children; of these deaths 59 died within three months, 56 within six months, 38 within nine months and 20 within twelve months. After deducting the number of deaths within the first year from the whole number of deaths among, the indentured immigrants treated in-doors, we find that only .68 per cent. died between the first and fifth year of their indenture.

There were in 1880 22,718 indentured Coolies, of whom 173 or .72 per cent. died within the first year and 383 or 1.7 per cent. between the first and fifth year of their indenture; in the same year there were 45,523 free Coolies, of whom 701 or 1.54 per cent. died.

Of the prevailing diseases, the more important are intermittent and remittent fever, simple bilious and occasionally of a pernicious or congestive type, diarrhoea and dysentery, debility, dropsy and

anæmia, bronchitis, pneumonia and phthisis, ulcers and cutaneous diseases generally. Of the 70,410 treated as in-door patients in the year 1880, there were 31,449 cases of intermittent fever with 150 deaths, 985 cases of remittent fever with 59 deaths, 3334 cases diarrhœa with 249 deaths, 3501 cases of dysentery with 146 deaths, 2599 cases of debility, dropsy and anæmia with 195 deaths, 2108 cases of bronchitis with 188 deaths, 411 cases of pneumonia with 106 deaths, 227 cases of phthisis with 84 deaths, 370 cases of convulsions with 118 deaths, 1333 cases of rheumatism, 1059 cases syphilis, 5749 cases of ulcers, simple and sloughing, 2504 wounds and 933 other injuries with 22 deaths; 3541 cutaneous diseases, 748 cases of diseases of eye and ear, 602 cases gonorrhœa, 2009 cases of diseases of stomach, liver and spleen, and other diseases of less importance.

The large number of ulcer cases arise from the dirty habits of the Coolies. They often get a large number of chigoes, a little insect very like a flea, and which burrows under the skin, into their toes and other parts of the feet, and which remain there until cysts or bags of eggs are formed around them, and when taken out leave large cavities, but if not taken out, which is a common occurrence, they decompose, and very often cause sloughing ulcers, and which frequently end in an amputation of the toes, and sometimes the whole foot. Capital operations are very rare; notwithstanding the large amount of machinery used on the estates, the various injuries and wounds received are not generally very serious.

In the treatment of intermittent and remittent fevers quinine is used very freely, and is generally considered a certain specific; other preparations of the cinchona, however, are used successfully. A combination of the alkaloids prepared in India from red cinchona bark grown there, and known as cinchona febrifuge, has been recently introduced by the Government and used by all the Medical officers, who were requested to report on its effects. The reports have generally been in favor of this preparation. It is the same as that known in the United States as Quinetum, and very probably that of Quinquina. We have used the compound tincture of cinchona of the U. S. Pharmacopœia with bromide of potassium with much advantage. The tincture of iodine has also been used very successfully, especially in those cases of intermittent fever complicated with enlarged spleen. The latter is often seen so large as to

extend across the umbilicus. Tincture of iodine is used in doses of 10 and 12 drops three times a day; tincture of iron, gentian or cinchona may be added, in some cases, with advantage.

In the treatment of dysentery large doses of ipecacuanha is generally prescribed, but some prefer small doses, from 3 to 5 grains, with more or less of Dover's powder and about the same quantity of gallic acid; of course, this is only used after the bowels have been relieved with castor oil or other mild laxatives.

Iodoform is successfully used in indolent ulcers and indurated syphilitic ulcers or chancres.

The Coolie as a rule is a very weak subject, seldom eating anything but rice and currie in their homes, and consequently has to be freely stimulated while under treatment from diseases of a depressing nature. Only a certain number of Coolie women are brought to the Colony. The morals of both Africans and Coolies are of the lowest character, consequently syphilis is a common disease among them. At the Government Hospital for Lepers it was found necessary to erect a new building at some distance from the old one so as to separate the male from the female, as it was impossible otherwise to keep them apart. At the time of the separation the doctor was violently attacked by the women, and would have lost his life but for opportune assistance. They blamed him for the separation. Even under such circumstances, and although suffering from leprosy, children have been born in the establishment. The skin disease known as Yaws is common. Very few confinements are attended by Medical officers, and then only in hospital. The Coolie woman assumes a sitting posture at delivery, afterwards they are rubbed all over with oil; no bandage is used; in two or three days they are about as usual. The navel cord of the infant is cut and left uncovered until it falls off. Among the native Indian population the women attend to their usual duties immediately after delivery, and the husband does the lying-in; he goes to his hammock and plays sick for over a week. Snake bites are not common. There is a species of fish called the hooktail which very often causes serious wounds on the legs of bathers as it cannot be seen in the muddy sea water.

In regard to the qualifications required to obtain appointments in this Colony a brief explanation is necessary.

For some years past there have been considerable objections made against Colonial graduates

holding positions as Medical officers in Her Majesty's Army and Navy and in the Mercantile Marine ships carrying passengers up to a certain number, when they would come under the control of the British Board of Trade. Only a few years ago there was some trouble in the Allan Line of Steamships because they carried Canadian graduates as Medical officers. The case, however, was immediately represented to the proper authorities, and was satisfactorily arranged. The Medical Council of Great Britain then took up the subject of recognizing the Colonial Universities, and through their representations a new Medical Bill was laid before the British Parliament, and discussed at considerable length. The Bill, however, did not pass through Parliament in consequence of some disagreement about certain sections of it concerning the Medical Council and its jurisdiction, &c., and not on account of the recognition of Colonial Universities. Several other bills have been since laid before Parliament and met a similar fate.

The subject of recognition of Colonial graduates was freely discussed at the several meetings of the Medical Council, and it was proposed that they be recognized and allowed to register their names in the British Medical Register, but in a separate column to show that they were practicing in the Colonies. Some members of the Council, however, were of opinion that Colonial graduates should be registered in the same column, and that they be accorded equal privileges with graduates of British Schools of Medicine, as they considered that Colonial graduates were fully worthy of the privilege of being placed on the same footing as themselves, plainly showing their opinions of, and feelings towards, the Colonial Medical Schools. It was not lost sight of, however, that the Ontario Medical Council refused to recognize British graduates, even though they were registered in the British Medical Register, and would not allow them to practice medicine in that province until they had passed a satisfactory examination before a Medical Board. The opposition on the part of the Ontario Medical Council was also freely discussed in the British Medical Journals, and caused many persons to oppose the recognition of Colonial graduates generally. This opposition being at variance with a section of the Medical Act of Great Britain passed in 1858, in which it is distinctly stated that any person registered in the British Medical Register can practice Medicine in any

part of Her Majesty's Dominion, but that he must first pay the licensing fee, if a license is required, by order of the local authorities. This was shown in an appeal case by one of the Judges of Ontario three or four years ago. A Scotch graduate applied for a licence to practice, but it was refused until he had passed an examination before the Medical Board. He declined to be examined, and began to practice near Toronto, when he was summoned before one of the lower Courts and fined. He appealed to a higher Court, and the decision of the lower Court was set aside under the section of British Medical Act named above. All persons practicing Medicine or Surgery in Great Britain and the Colonies prior to the passing of the Medical Act of 1858 were privileged to register their names in the British Medical Register, and many practitioners in the Colonies took advantage of this privilege.

As a rule, the majority of Medical practitioners in all Her Majesty's Colonies except the Dominion of Canada are graduates or licentiates of England, Scotland or Ireland; many of them, however, are not registered as they have never practiced medicine there, but have immediately gone to the Colonies, where the degrees are recognized on examination by the local authorities, and permission is at once granted them to practice. These gentlemen are with few exceptions prejudiced against Colonial graduates, and of course will, whenever an opportunity offers, try to poison the minds of the public as well as the authorities against them. The British Government, and its representatives in the Colonies, now begin to see the value of Colonial degrees, knowing that the curriculum of studies in the Colonial Medical Schools is quite as good as the majority of those in Great Britain, and that a number of Colonial graduates are now holding official appointments in many of the Colonies; still it is very perceptible that the preference is given to graduates of Great Britain and Ireland. It is therefore advisable that Canadian graduates, who may be disposed to practice medicine in any of Her Majesty's Colonies except Canada, go to Great Britain and pass an examination for a degree from one of the Licensing bodies there, and register their names in the British Medical Register, that they be the better able to fight against the prejudice above named.

Canadian Schools of Medicine are well represented in the Colony of British Guiana, there being one graduate from Toronto University and two

from Bishops College. The gentleman from Toronto, however, is a licentiate of the Edinburgh College of Surgeons. Two of these gentlemen are District Medical Officers in the Immigration Department, and the other is Assistant Resident Surgeon in the Colonial General Hospital.

Progress of Medical Science.

RECENT ADVANCES IN THE THERAPEUTICS OF DISEASES OF THE SKIN.*

By W. ALLAN JAMIESON, M.D., F.R.C.P., Ed.

I have thought it would not be uninteresting, possibly also not uninteresting, were I to summarize some of the more recent advances and improvements in the mode of treatment of skin diseases which have stood the test of practical experience, as an introduction to a course of lectures on diseases of the skin.

It has frequently struck me when reading over works on therapeutics, how small a space comparatively is in general devoted to the actions and uses of drugs when applied to the surface of the body, as compared with that set aside to the supposed influences they exert when swallowed or otherwise brought into contact with the mucous surfaces of its interior. I say supposed, because, though the mode in which some few substances so introduced act on the economy has been pretty satisfactorily worked out, there are still a vast number concerning the *modus operandi* of which we know very little indeed, some nothing at all. True, while certain remedies are taken under certain diseased conditions, certain results may with tolerable accuracy be predicated to follow, but in which way this is effected theory even does not in all cases explain. In the case of internal medicinal agents, the difficulty of unravelling this action is great, and all the more so, because in this country, through the influence of a misguided sentimentalism, experiments on the lower animals are practically prohibited; but the same difficulty should not be experienced to anything like the same extent in the case of external remedies. Take sulphur, for instance, when swallowed in a sufficient dose it acts as a purgative. In smaller and continuous doses it seems to increase the amount of water excreted by the skin, is a so-called diaphoretic, at all events it appears in the sweat, probably as sulphuretted hydrogen, for under such circumstance it blackens silver coins and ornaments. But what is its action when applied as a paste or ointment to the surface of the body? The answer to such a question would be

in the majority of cases, "it cures scabies and is good for acne." In the first case, probably the heat of the body oxidizes some of the sulphur, and as sulphurous acid it acts destructively on animal life; in the second, a different explanation must be given. Sulphur when applied to the surface of the body acts as an irritant and stimulates the cells of the rete Malpighi to a more rapid growth. Hence, when indirectly used, an increase of the normal desquamation of the cuticle and of that of the endothelial cells of the glands of the skin takes place. In acne this normal exfoliation is always sluggishly performed, and thus the stimulant action of the sulphur leads in time to a healthier condition. We may even go a step further, and maintain that so applied, sulphur rouses the muscular element of the skin to more active contractility, and thus diminishes the passive hyperæmia of acne rosacea. One of the most active of the sulphur compounds, the sulphide of calcium, has been much praised by Ringer, in what may be called the furuncular diathesis, as hastening the maturation of those boils which have already appeared, and lessening the tendency to the formation of fresh ones. Bulkley has particularly insisted on its value in hordeolum or sty, several of which are so apt to form on the eyelids in succession. Sulphide of calcium is a very unstable salt, and it may well be that the sulphur set free from the calcium may in its nascent condition exert a special influence on the peri-glandular plexuses, and on the migration, fatty degeneration and death, of the exuded leucocytes. This, however, is but a theory; and while I believe that no one can satisfactorily use a remedy without a theory as to its mode of action, still this is not the place for airing hypotheses, but for placing before you ascertained facts.

In the treatment of skin diseases we rely much on ointments, as these have certain valuable properties not possessed by lotions or liquid applications in general. In conditions of chronic inflammation of the skin, the long-continued congestion leads to thickening and induration, which prevents the sebaceous and sudoriparous glands from performing their proper functions, so that the surface is not lubricated, and becomes dry, hard, and brittle. The oily material must be artificially replaced. Now in doing this the great difficulty has been that animal fats, of which prepared lard was the usual representative, and also most vegetable ones, soon became rancid, all the more rapidly when combined with metallic oxides or salts, and at the heat of the body. The fatty acids so engendered irritated and excoriated the skin, and the ointments often did more harm than good. At first, attempts were made to prevent the lard from becoming rancid by adding preservative ingredients, as benzoic acid, in Mr. Erasmus Wilson's zinc ointment. This was an advance, but benzoic acid is itself irritating. The Americans with their usual ingenuity came to our aid, and in cosmoline, a refined derivative from the destructive

* Introductory Lecture to the Course of Diseases of the Skin in the Extramural Edinburgh, Summer Session, 1881.

distillation of petroleum, we have an almost unchangeable substance, not irritating, and of elegant appearance, which has almost replaced lard in the preparation of ointments. It has however, one fault; it wants solidity, and is often best used in combination. An almost perfect basis for ointments is made by mixing cold cream, made from oil of almonds, white wax and spermaceti, with cosmoline, in suitable proportions. This will scarcely turn rancid, and is solid enough at all temperatures, so that when it is desirable to keep up the action of an ointment for many hours without disturbing the surface, this suits much better than simple cosmoline. Cosmoline is volatile at the temperature of the body, yet when a thin ointment is needed, as in applications to the scalp, there is perhaps no better basis than cosmoline alone.

In many disorders of the skin one of the most troublesome symptoms we have to deal with is what is known as the sensation of itchiness or itching, and could we cure this, the disease itself would oftentimes disappear. Before saying a little on the more recent means of relieving it, let us try to understand what causes it. It must arise from some irritation of the extreme peripheral terminations of the sensitive nerves. Now the medullated nerves distributed to the skin pass through the corium, and either end in special organs, as pacinian corpuscles, the end-bulbs of Merkel, or tactile corpuscles; or, losing their medulla, they form "a subepithelial plexus from which certain fibrils enter rete Malpighi, where they branch and form a delicate terminal network lying in the intercellular spaces."* It would seem that it is these little nerve fibrils which, when their condition of stability is disturbed, occasion the phenomenon of itching. Various conditions may induce this instability; either too rapid a current of blood through the superficial capillary plexuses, as in the sudden hyperæmia of urticaria, may occasion this, or quite the contrary condition—too slow a movement in the venous radicles, as in legs with varicose veins. Certain morbid products or unnatural substances circulating in the blood irritate the peripheral nerve twigs and cause itching, as bile pigment in jaundice of some standing. Some think that it is the bile pigment, becoming oxidised on coming to the surface, which causes this; it rather seems to be due to persistent contact of the bile pigment with the nerve fibrils; hence pilocarpine washing it out from within has been successfully used by Professor MacLagan in icterus, by Simon and others in prurigo and pruritus, where it renders the cells of the rete more succulent and improves their nutrition. In nearly all cases itching is a symptom of superficial irritation. It is met with in healing ulcers when the film of horny cuticle is closing over the granulations and the new and juicy cells are being compressed for the first time from without, or by the conjoined

pressure from within and from without, since the further out-budding of new capillaries, due, as Mr. Hamilton believes, to unresisted pressure from behind, has been prevented. The itchiness of the skin when there are varicose veins or capillaries in the leg, has been most clearly explained and accounted for by Kaposi, an itchiness which in many cases is the first indication of a future outbreak of eczema there. It may be remarked here how very seldom—scarcely ever—any complaint of pain as an accompaniment of eruptions of the skin is made. The nearest approach to it is perhaps the sensation of burning or heat in the early stages of eczema. Pain in the skin only occurs when the sensitive nerve fibrils are continuously compressed by some new growth, as in carcinoma or sarcoma of the skin, which has lasted some time; or when, as in irritable ulcer, a fibril of a sensitive nerve is exposed, probably unprotected by its sheath on the surface. This, as Mr. Hilton has shown, is relieved by finding out the acutely tender part, and dividing the nerve behind it. We have already alluded to the use of pilocarpine in relieving some forms of itching. When, as in urticaria, too rapid a flow of blood through the skin seems to be the cause, all means which keep the body cool diminish this symptom. Hence the value of vinegar or alcoholic lotions, which promote evaporation from the surface, and the disuse of flannel, which, being a non-conductor, hinders exhalation, while its rough texture stimulates the skin and favors congestion. Then we have remedies which coagulate the albumen of the tissues, as carbolic acid and tar, and thus deaden sensation; both penetrate a short way into the epidermis, and while carbolic acid is the more rapid in its action, it is, from its volatility, also the least permanent. Camphor has long been known as an antipruritic of some value, but when combined with chloral hydrate, forming a liquid, its efficiency is much increased. It may be painted on pure, or used diluted with two or three parts of cosmoline. Thus employed it forms one of the best means we possess for the relief of pruritus podicis, when this does not depend on ascarides or any plainly evident cause. But it occasions pain when applied to a part denuded of epidermis. Itching which owes its origin to too slow a current of blood, of which the most typical example is that seen in eczema connected with varicose veins of the leg—but to the same category also many examples of pruritus scroti, labiorum and ani may be referred—is best relieved by careful flannel bandaging, well applied suspensory bandages, and laxative salts or mineral waters, which unload the rectal veins by freeing the portal circulation, combined locally with weak tarry lotions, one of the best of which is Wright's liquor carbonis detergens, a well-made alcoholic solution of coal-tar, suitably diluted.

We owe to Mr. Balmanno Squire the introduction of chrysophanic acid as our most efficient remedy in relieving psoriasis. Both Mr. Squire,

*Malcolm Morris. *Skin Diseases*, p. 13.

however, and Dr. James Adams, who wrote an excellent paper on it in the *Edinburgh Medical Journal* recommended much too strong an ointment. Mr. Squire still adheres to a formula of two drachms to the ounce. This may do all very well for some pachydermatous people, whose skins react little to irritants, but in general from ten to fifteen grains in the ounce of cosmoline is potent enough. Messrs. Macfarlane in the North Bridge sent me a specimen of what they called chrysarobin;* whether this differs in aught from well prepared chrysophanic acid I do not know, but it seemed to me, while equally efficacious in curing (for the time) psoriasis, to be less apt to induce the troublesome and alarming erythema, which so often follows too energetic a use of chrysophanic acid. In employing chrysophanic acid for psoriasis it should be remembered that a little of the ointment well worked into the patches, previously cleared of their scales, does infinitely more good and less harm than a great deal dabbled in. Alizarin, suggested by Dr. Adams as a substitute for chrysophanic acid, on ingenious chemical grounds, does not appear to have found much favor, but pyrogallie acid introduced by Jarisch has been of more value, though not well adapted for application to extensive surfaces. Since it does not irritate and inflame the conjunctivæ, it is better suited than chrysophanic acid for psoriasis affecting the scalp and face, and may be used in the strength of one drachm to the ounce. Besides its value in psoriasis, pyrogallie acid seems also to exert a slowly destructive action on some forms of new growth, especially those which are allied in a somewhat natural class grouped round the sarcomata. These it causes gradually to wither away, and opens up a more hopeful prognosis in the case of tumors so eminently apt to recur as those are. I am inclined to think from my experience of its use that it exerts an influence something like tannin. Under its use the growth becomes smaller, denser, and less apt to bleed, and crumbles away in parts. It irritates the skin round the tumor, so that it must be guarded by covering it with a protective with a hole in it just the size of the tumor.

The flexible collodion of the Pharmacopœia has proved itself useful in many ways. In restraining the advance of erysipelas migrans, more particularly in children, I have often found it of great value. When burns of the skin do not advance beyond the first grade a coating of flexible collodion serves to protect the vesications from rupture, and in no way interferes with treatment by cotton wool. Its applicability to the various forms of herpes is well known, but less so its value in chronic eczema of the palms, where it lessens the itching and helps the fissures to heal. I have not found Ferris's anodyne amyl colloid half so valuable as the simple collodium flexile, while its odor is unpleasant.

The late Dr. Tilbury Fox insisted particularly on the use of soothing remedies in various forms of skin disease where there was irritation to be allayed. These may consist of substances in the state of powder, as the carbonate and oxide of zinc, bismuth, chalk, &c., suspended in water, to which a little glycerine has been added. Glycerine when so used must be the best and purest, free from fatty acids, and must be well diluted. Pure glycerine undiluted is an irritant, freely diluted with water is an emollient, and the best remedy we have for that dry and fissured state of the cuticle occurring in the hands and face and legs during frost or when east winds are prevalent. The same softening effect is produced when glycerine and starch are combined in the glycerum amyli of the Pharmacopœia, the starch here serving both to dilute the glycerine and also to impart its own demulcent properties.

When the epidermis is not renewed with sufficient rapidity, when there is a sluggishness on the part of the skin, the face in particular looks grimy, the complexion has not its healthy transparency. The cause of this is not primarily in the skin; the organs elsewhere of excretion, of secretion, and assimilation are acting badly, and these demand attention and regulation. But we must also act on the skin and its glands; stimulation is required here as elsewhere. The commonest stimulant used is soap, which always contains more or less free alkali. The alkali acts by causing the albuminous tissues to swell up, the cells thus become separated and are thrown off. Alkalies act chiefly on the superficial strata of the epidermis, when, at least, they are only permitted to remain for a short time in contact with them. But the action of acids on the cuticle and rete mucosum has been, until recently, overlooked. Acetic acid in a dilute form renders albuminous tissues transparent, but it has not much effect on the outer horny layer of the epidermis; it appears to penetrate more deeply, absorbs water from the rete cells, and, like the alkalies, induces desquamation, but more gradually, and from within outwards. Unna has very successfully applied this to the treatment of "a bad complexion." Where there is some degree of acne punctata and comedones, he employs a paste consisting of four parts of kaolin, three of pure glycerine, and two of vinegar. When this is smeared on the face under such circumstances, the eyes being kept shut during its application, it dispels the acne and comedones, wonderfully clears up the muddy complexion, and prevents the simpler form of acne advancing to the graver.

Warts on the hands are always disfiguring, apt to become ragged and to bleed, and are very probably contagious: their removal is therefore a matter of importance. Glacial acetic acid, solid nitrate of silver, and other means have been recommended and used, but chromic acid, one to one of water, is by far the best remedy. The skin round each wart is first protected by painting it with oil, and then the wart itself is soaked with

* *Vide Practitioner*, vol. xv. p. 14, and vol. xiv. p. 45.

the solution of chromic acid; this absorbs water from the tissues, coagulating and hardening the albuminous tissues at the same time, and the unsightly warts soon disappear. These warts seldom appear after puberty on the hands, but a healthy girl, well-grown, aged fifteen, came to me some time since with dozens of them on her hands, which had annoyed her for six years. Of course, they much interfered with work, being always in the way. Steady use of the chromic acid removed them in a few weeks.

Chaulmoogra oil,* which has obtained a certain reputation in India for the amelioration of the symptoms—I will not say the cure—of leprosy has been introduced into this country with the somewhat vague reputation of being useful in skin diseases. It has answered well in my hands in some cases of eczema of the face which had passed the moist stage and tended to become dry. It seems to act as a mildly stimulating astringent, but its applicability is certainly limited, and experiments with it in Germany recently reported have not increased its reputation. It is in the strumous forms of eczema of the face in children and young persons that the best results from its use have been attained in my hands, and I have also found it of considerable value in the later and scaly stage of eczema of the scalp. The form in which I have used it has been as an ointment in the proportion of a drachm to the ounce of glycerine, of starch, cosmoline, or simple ointment.

The subject of parasitic diseases of the skin has received considerable attention, and also some elucidation of late. Favus has become so rare, and the treatment has been so thoroughly settled, that allusion need not be made to it, and tinea versicolor, though fairly common, is easily cured. But there are two varieties of tinea tonsurans at least which still prove intractable, and to the recent deliverances on these I wish to ask your attention for a little. We only occasionally, and then mainly as a transplanted exotic, meet with tinea trichophytina cruris, the so-called eczema marginatum, where the parasite finds a favorable nidus and suitable conditions for its growth in the warm and moist situation of the inner surface of the thighs and the adjoining parts of the scrotum. There seems to be no better antidote to its luxuriance than freshly prepared sulphurous acid as recommended by Dr. Bulkely. It is of much importance that the solution of sulphurous acid should be fresh, since by exposure to the air, or when long kept, at least unless in a well-closed stoppered bottle, the acid partly becomes weaker from escaping from the water in which it is dissolved, partly becomes oxidized into sulphuric acid, which is an irritant and not a parasiticide. The sulphurous acid sponged freely on the parts several times a day soon lessens the itching, and eventually cures the disease. Any excess of irri-

tation caused by the acid subsides when the use is discontinued for a day or two and some soothing ointment or lotion substituted for it. But while we only occasionally meet with examples of this form of ringworm, nothing is more common than tinea tonsurans of the head in children. When early seen such are in general easily cured by blistering with acetum cantharidis, by the use of glacial acetic acid either pure or slightly diluted with spirit and glycerine, or by Coster's paste—iodine dissolved in colorless oil of tar. But it is far otherwise when the disease has been neglected, or when, owing to some peculiarities to be alluded to immediately, it has obtained a firm hold on the skin. Sections of the skin from parts affected with ringworm have rarely been obtained. Dr. Thin, from observations made on the skin of a horse, concluded that the parasite lived exclusively in effete epithelial structures. Dr. Robinson, of New York, in a paper published in the *New York Medical Journal* for March, describes and figures the appearances found in skin from tinea tonsurans of the head, and has found the parasite in the corium, the hair-bulb, and even the subcutaneous tissue. He concludes his paper in these words: "The anatomical seat of the fungus in tinea tonsurans capillitii is different in cases of disease. It may be seated only in the corneous layer, or it may extend even to the subcutaneous tissue. Probably in those cases in which a large number of hairs fall out entire, the fungus extends deeper than in those cases of only stubbed hair. The deep seat of the fungus in some cases is probably the cause of the occasional obstinacy of the disease and difficulty of cure." When the resistance of the tissues is lowered by anæmia, or by the condition we term tuberculosis or scrofulosis, it is easy to understand that the spores and mycelium will make their way further and without inflammatory reaction. The great difficulty in the treatment of ringworm of the head has been that the agents employed for its cure did not penetrate deep enough to reach those outlying spores which were always ready to germinate and reproduce the disease. Evidence has recently been accumulating to prove that for many of those rebellious cases we possess in the oleate of mercury a reliable parasiticide. Dr. Alder Smith recommends it in such cases, and says that only once did he see slight salivation produced by its use. In one of Dr. Robinson's cases, where the fungus was proved by the microscope to be deeply seated, five or six applications of a 6 per cent. solution of oleate of mercury cured it, though it had lasted for four months. We may assume, then, that the oleate of mercury used cautiously is a remedy for tinea tonsurans of considerable penetrating power. But there still remain some cases which resist all the measures usually employed, and for these Dr. Alder Smith has recommended croton oil painted on these patches sufficiently often to produce a pustular eruption, resembling what has been known as kerion in at least one of its forms. When this

* *Vide Practitioner*, vol. xxi. p. 321.

is done not only do the hairs become loosened and fall out, carrying with them much fungus growth, but the inflammation extends beyond the follicles into the perifollicular tissue and destroys the vitality of the outlying and deep-seated spores, and renders the tissue no longer a fit soil for their growth. One other remedy for *tinea tonsurans* needs a single remark, viz., turpentine, which Dr. Foulis has found so useful. In my hands, used as he has advocated, I have thought it an adjunct to other means, but not in itself and alone curative.

Besides the use of medicinal agents in diseases of the skin, various operative measures have been of late employed in some forms, and these demand a share of attention. Chief among these is that of scraping by means of the sharp spoon or dermal curette, introduced by Volkmann of Halle. The value of this mode of treatment in suitable cases and forms of disease can scarcely be overestimated. Take lupus, for example. Till recently our means of local treatment consisted in caustics and the galvanic cautery, to which may now be added the thermocautery of Paquelin. With two exceptions all the caustics and the cauteries did too much. Tissues still uninjured by the new cell-growth were destroyed along with it, and hence there arose a scar, depressed and tending to contract much, causing additional disfigurement to that already inflicted by the ravages of the disease. Nitrate of silver and arsenic alone act on the cell-growth itself, and leave unaffected the healthy tissues. But the former, though well suited for small nodules of lupus, is a slow and superficially acting caustic, and thus further ravages were made while the curative treatment was progressing. Arsenic again is a painful caustic, cannot be applied to large areas for fear of absorption and toxic action, and has thus found more favor with quack cancer curers than with the medical profession generally. Mr. Marsden has done much to bring it into favor, but not very successfully. And Hebra himself, who spoke much in its praise, did not latterly extensively use it. The spoon has this great advantage, that the surgeon while using it can tell exactly by his sense of touch when the limits of disease have been reached, and healthy or little diseased tissue is being encroached on. The diseased parts in lupus break down with the utmost readiness under the spoon, while the sound parts offer an almost unconquerable resistance. Indeed with the spoon one can scarcely do too much, one is far more likely to accomplish too little. The cell-growth infiltrating itself along the vessels, penetrates beyond the reach of scraping, and thus demands other measures for its removal. Though a painful operation at the time, necessitating the employment of anæsthetics for its efficient performance, the pain ceases at once after scraping has been discontinued. It is a bloody operation, but the bleeding is arrested with the utmost ease by pressure. A thin slough separates, then a clean healing surface is left,

which generally cicatrizes over readily. Islets of disease are left here and there, however, at the margins of the patch, and within its area, where the cell-growth has penetrated more deeply, perhaps along the vessels of a peri-glandular plexus, or by the communicating vessels which unite the superficial and deep horizontal layers of cutaneous blood-vessels. These are best treated by making many minute punctures with a fine knife, which stimulates absorption by causing small hæmorrhages into the tissue. These occurring suddenly excite the tissues to reaction, as an effect of which blood-clot and cell-growth simultaneously are removed. The scar resulting from a successful scraping is smooth, soft, and little, if at all, depressed below the skin which surrounds it. Equally well suited for scraping are the superficial epitheliomata of skin and accessible mucous membranes, as the lip. In this way the early stages of rodent ulcer can be most satisfactorily treated. These forms are usually long, many years often, before they infect the lymphatics, and may be radically cured by scraping. I have in this way treated several cases of rodent ulcer on the upper part of the face and epithelioma of the lip without recurrence, though years have passed, while the resulting cicatrix was in every way satisfactory. Primary sarcoma of the skin, a rare disease, can be treated by scraping, but, from the nature of the morbid growth, relapses are more apt to occur than in superficial epitheliomata. In spindle-celled sarcoma, too, the growth resists the spoon, and is by no means so readily removed. It is the custom of some American dermatologists to sear the raw surface with the thermo-cautery after scraping lupus. I have no personal experience of this, but it is certain that there is here again the risk of doing too much by destroying minute areas of healthy tissue, while even in this way we cannot follow the finer ramifications of the disease. The application of a strong solution (forty grains to the ounce) of chloride of zinc to the scraped surface may possibly have some advantage, since it has some penetrating power, but it gives rise to acute biting pain for hours, and does not certainly preclude relapses.

Small fresh spots of lupus, appearing as little red jelly-like nodules rising up from the corium through the epidermis, are admirably treated by the plan suggested by Auspitz. A thickish needle or his puncturing instrument is dipped in iodide of glycerine, one in twenty, and this is plunged into the nodule; slight inflammatory action is set up, and the lupus deposit withers up and disappears, leaving scarcely a trace.

There are perhaps no more unsightly blemishes than the so-called mother's marks, port-wine marks, and flat nævus vascularis, which are so frequently met with in the face. I leave it to obstetricians to explain why these should in a large proportion of cases occupy the *left* side of the face. I cannot give the statistics, but any one may satisfy himself of this by noting the persons

affected with this whom he meets in the street. Were we able to remove these marks, or even to convert the red or purplish stains into a white surface, we should have no lack of candidates to be operated on, and it almost seemed, a couple of years ago, that this was in a fair way of being accomplished. Mr. Balmanno Squire about that time announced that he had, by means of multiple and repeated fine linear scarifications, obliterated, or nearly so, one of those marks. Mr. Squire based his suggestion on the fact that such multiple scarifications were of value in the acquired telangiectasis met with in acne rosacea, where the dilated vesicles withered up and disappeared under their employment. The linear incisions were to be made, according to Mr. Squire, at different angles to each other at each repetition of the operation. Such a simple mode of procedure, and which promised so much, was soon extensively tried, and among those who adopted it were Dr. McCall Anderson and Mr. Malcolm Morris. Both unhesitatingly condemned it,* not only as useless, but as positively injurious, since Mr. Morris found that not only did he not cure his patient after more than a hundred sittings, but some nodules of cicatricial keloid arose, a result which might almost have been predicted. Mr. Squire then said in a second communication that by making the incisions obliquely instead of vertically to the plane of the skin, obliteration of the vessels could be affected. I tried both plans fairly, and can say that, so far as my experience went, no effect whatever was produced on the nævus. I fear, therefore, that we have here to do with a case of too-hasty generalization. Some cases of port-wine mark may, however, be treated with a fair degree of success by a method recommended by Dr. Sherwell, called by him tattooing. This consists in pricking the surface freely with a bundle of needles dipped in carbolic or chromic acid, of a strength of from 25 to 40 per cent. The surface is then dried and sponged with alcohol, and a thick layer of collodion painted on. The operation is neither painless nor instantaneous, requiring to be repeated at intervals of some months, and sometimes leaves a scar; still it appears the best method yet available. The varicose capillaries in rosacea and acne rosacea can undoubtedly be much diminished both in number and calibre by various modes of treatment. One of these is by splitting them up longitudinally as recommended by Dr. Liveing, a fine narrow knife being used. This succeeds best with the larger vessels. The smaller can be punctured with a star or diamond-shaped, or rather headed, needle, as used by Hebra and Kaposi; this lacerates the vessel and destroys its continuity. We can thus obtain considerable diminution of the redness, but the results are not always so permanent as is to be desired.

Another mechanical agent in the treatment of

skin diseases of recent introduction is the solid India rubber bandage introduced by Dr. Martin. These bandages have been specially recommended as curative in eczema and ulcers of the leg. I cannot say much about the latter, but have used them to some extent in eczema. When used for this they act much like a poultice, the cuticle is macerated and removed, and the surface becomes smooth and clean. Some cases of eczema of the legs can be cured by their use exclusively, others certainly need other and additional treatment, and some they do not suit at all. When the eczema has been of some duration, the limb œdematous and the cuticle thin and friable, vesicles and bullæ, often accompanied with considerable pain, are apt to make their appearance, necessitating the abandonment of the India rubber bandage at least for a time, and the substitution of a cotton, one, or at least of thin muslin beneath a roller of domette flannel. I am sure Dr. Martin is right in insisting on the purity of the rubber used. Whether bandages of as honest a texture as his own are now made in this country I do not know; when Dr. Martin's were first introduced they certainly were not, and as his are now only half their original price, and as good, I make a point of using them.

In these remarks it has been my object to show that the department of skin diseases has, like other branches of medicine, been advancing. We have certainly not succeeded in transferring those affections from the incurable to the curable class in anything like all cases, but I can claim that we are now able to employ our remedies with greater precision and certainty, while the list of those available is constantly receiving accessions of real value.—*Practitioner*.

THE TREATMENT OF THE NIGHT-SWEATING OF PHTHISIS.

By J. M. DA COSTA, M.D.,

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Sweating in phthisis is both an annoying and a serious symptom. It very often happens in the early morning hours, and the patient is languid all day from the drain. It may follow the decline of the paroxysm of the hectic fever, but also occurs in those who have but little if any fever, and certainly nothing like hectic paroxysms. To arrest it is not only to give the patient comfort, but to save his strength and thus to retard the progress of the disease. The remedies which influence the destructive malady and improve nutrition, restrain it; but they do so slowly, and we turn, therefore, naturally, to agents which, while they act much more quickly, in so doing assist at the same time the influence of the general treatment. A great many of these remedies are empirical; some take into account the supposed pathology of the sweats,

* *British Medical Journal*, vol. ii., 1879, p. 293:

and apply the fine experimental therapeutical research of the laboratory to the benefiting of a serious symptom. We might do this with even more accuracy if the pathology of the occurrence were better understood; if it were known how it is that the morbid conditions act on the sweat-centres which are so profoundly disturbed. Yet both physiology and pathology are, in this matter of sweating, alike in health and in disease, still a good deal in the dark.

I shall select for discussion the action of such remedies as are valuable yet comparatively new, and not of such tried veterans as oxide of zinc, the mineral acids, tincture of iron and decided doses of quinia.

Yet, before I examine into the value of the medicinal substances I will allude to some subjects connected with clothing and with bathing, which I know are constantly ignored and are yet of importance. The clothing is often much too heavy. I wish then to impress upon you that one of the first things to be taken care of in the management of night-sweats is to see that the patient's clothing is light, particularly that he be not weighted down with heavy bedclothing; and very often you may, by paying attention to this simple means, prevent or certainly very much lessen the exhaustive perspirations. In addition, direct your attention to the state of the skin; let the patient take a daily, slightly astringent sponge-bath, having in the water alum, rock-salt, or even whisky or alcohol, or let him be sponged with quinia dissolved in whisky or alcohol, or with water, to which a small amount of solution of ammonia has been added; and follow this by friction to give a healthy glow to the skin. You will find that in some persons very hot water checks the excessive sweating, but in the majority moderate friction, following astringent washes, is better.

In reviewing the remedies with which the last few years have made us familiar, we find quite a number with which the experiments and the sagacious observations of Dr. William Murrell have acquainted us. *Muscarine* stops sweating on the second or third night, without causing abnormal dryness of the skin. It is best given in three doses, at the interval of an hour, in quantity not less than five minims of a one per cent. solution of a liquid extract. *Picrotoxine* produces, generally, no effect the first night; may be given solely at bedtime, either in pill of one-sixtieth of a grain, or in solution with a little glacial acetic acid. *Nitrite of amyl*, a good, though not a very certain or pleasant agent. Dose from one to three minims.

Dover's powder, although it cannot be called a new remedy, since its use was advocated many years since by Stokes, has come again into prominence, and in doses of two to ten grains at bedtime undoubtedly shows power in controlling colliquative sweats.

I shall presently explain to you how I have for some years used *jaborandi*, added in small doses to atropia, to correct some of its unpleasant effects.

And it was while so using it that I began to be aware of its influence on night-sweating of phthisis. Dr. John M. Keating, prescribing it in small quantities of the infusion, finds it answers extremely well; he believes that it contracts the capillaries, and thus explains its action. Dr. William Murrell, whom I have already quoted, has administered it or pilocarpine in thirty-three cases, in all stages of the disease. Of pilocarpine the dose employed was generally $\frac{1}{6}$ of a grain, either at bedtime or three or four times daily. It acts somewhat slowly, but is said to be very efficacious and even to lead to permanent results. I confess that I have not formed so high an estimate of it. Indeed, I cannot say that, given by itself, it ranks with me very high.

Salicylic acid has attracted attention more for its supposed influence on the febrile conditions of phthisis than as a remedy for the sweating. Still it has been so employed. Kohnhorn has recommended dusting with salicylic acid three parts, ten of starch and eighty-seven of talc earth, the entire surface of the body. Internally salicylic acid has been resorted to for night-sweats by my colleague Dr. Hutchinson, and from him I learnt its use for that purpose. In some cases it seemed to have a good influence, but the cases are not yet numerous enough to warrant a definite conclusion as to its merits.

I was led to use *physostigma* for the same reasons which led me to investigate *jaborandi*, to try and counteract with it some of the disagreeable effects of atropia, while preserving its useful ones. But in doing so it was first necessary to observe whether calabar bean had in itself any influence on night-sweats; and during the winter of 1879-1880, with the active and zealous aid of Dr. Henry M. Wetherill, at that time the resident physician in my wards, we tested the matter in this Hospital. We found that calabar bean had an influence. To cite a few of the observations: In a man with advanced tubercular consumption, attended with profuse night-sweats, two minims of fluid extract of *physostigma* were given; he was sweating at the time; his respirations were 30, the pulse 120, the temperature 100°. In an hour afterwards the skin was almost dry; respirations were 24; the pulse was 104; the temperature 96.6°; it rose in two hours after this to 97.8°. There had been no unpleasant effects, except great thirst. In another case we first noticed the sweating carefully, while a placebo only was given. It came on profusely at 12 p.m., and while profuse, the respirations were 32, pulse was 122, the temperature 97°; the sweating lasted four hours; as it passed away, the respirations were 28, the pulse 114, the temperature 99.8°. At the same period of the next twenty-four hours, and when the sweating had fairly begun, although the temperature then was 99.5°, a dose of two minims of the fluid extract of calabar bean checked the sweating in an hour and a half, the temperature rising to 100.6°. In a third case of marked phthisis with night-sweats,

the temperature before the sweats at 3 p.m. was 100.5°; in an hour afterwards, with a profuse sweat it had declined to 98.6°; four minims of the fluid extract were then given, the sweat was completely checked in an hour, the temperature rising to 99°; there was no decided effect on the pupil, and no unpleasant symptom. In a fourth case, the profuse early morning perspiration, were arrested in two hours by the same dose, the pupils being slightly contracted, the pulse becoming less strong; the temperature declining from 100° to 97.6°. Now both in these and other cases the remedy was given in two minim doses, once or twice in the evening, sometimes four minims at one dose (the preparation being of the strength of one of the bean to a minim of fluid), and the sweating was undoubtedly to a great extent prevented; but only in one instance was the effect at all permanent; and on the whole, while the action of calabar bean is undoubted, it is decidedly inferior to atropia and to ergot.

I shall now pass to the two remedies which I think preëminent—atropia and ergotine. The use of *atropia* is now so widely known, and it has been so much resorted to that, although having employed it systematically in this hospital for night-sweats for years before it began to attract general attention we may claim for it the strong partiality of early knowledge. I shall only state that it is at present accepted as the most potent agent we possess to control inordinate sweating, particularly in consumption. Not one of the remedies which I have mentioned to you has, in my opinion, anything like its power. But atropia has a most serious drawback. Even the smallest dose, to be effective, $\frac{1}{4}$ of a grain, produces such a dry mouth and throat that it often keeps the patient awake, and, in not a few instances, increases his cough. Duboisia, so much like atropia, even in its influence on sweating, has the same unfortunate effect. Local remedies, such as sucking pieces of ice, chewing chamomile flowers or sassafras pith, sipping infusions of slippery elm, only afford partial relief, moreover they prevent sleep. And the inconvenience witnessed led me to a series of observations that I have here carried on for the last four or five years to find, among the agents which possess a physiological antagonism to atropia, one which, without materially, if at all, diminishing its action on the skin, might mitigate its influence on the salivary secretion. Not to detain you too long, I will speak particularly of strychnia, calabar bean and jaborandi, added to belladonna or atropia. With reference to strychnia, it is in many respects not antagonistic to belladonna; one, indeed, may promote the activity of the other; and I was led to hope all the more from a combination being effective with a smaller dose of the belladonna or atropia, and was induced to persevere with my observations after reading Lauder Brunton's remarks on the unaided action of strychnia in the night-sweating of phthisis. But this expectation has only been

partially realized. The atropia preponderates, and even in decreased doses dries the throat.

From both calabar bean and jaborandi we get better results. I have already laid before you my observations with the former given alone, and you will recall the fact, which has been made very apparent by the experiments of Fraser, Bartholow and other investigators, that in most respects it is a true antagonist to atropia. It leads to an increased flow of saliva, and is said to increase the perspiration. But it certainly does not do so in phthisis, whatever be the explanation; and if you add gr. $\frac{1}{4}$ to gr. of the solid extract, or two to three minims of the fluid, to $\frac{1}{8}$ or $\frac{1}{4}$ of atropia you preserve or heighten the good effect of the latter and lessen its evil ones. Still better I find is jaborandi. The drug, you are aware, illustrates in its action a complete antagonism to atropia and produces profuse secretion from the salivary glands. Yet, though in health it promotes the most active discharge from the skin, its powers in small doses to arrest morbid sweating have been abundantly proved, and added in small doses to atropia, say ten to fifteen drops of the ordinary fluid extract to $\frac{1}{8}$ of a grain, or, as I have often done, a dose of this quantity given two hours in advance of the atropia, and repeated with it, the sweats will be as well influenced, while the discomfort arising from the dryness of the mouth will be greatly diminished. The effect of the combination is undoubted, and its power is not confined to the night perspirations of phthisis.

Still we cannot, even by the combination of jaborandi with atropia, always remedy the annoyance. It is difficult to hit upon the exact dose, and the atropia will at times overpower the jaborandi. I have thus been led to look for an agent which should possess something of the certainty and permanence of action of atropia without its drawbacks, and I think I have found it in *ergotine*. My first observations, made some years ago, were with the fluid extract of ergot, but I have abandoned this for ergotine as better and more easily administered. The power ergot has of contracting the arterioles and of checking excessive discharges suggested its use, and the results have been very satisfactory. The dose of ergotine I employ is usually two grains three or four times daily, and by the second night the influence begins to manifest itself. The remedy may then be continued and gradually abandoned; it produces no annoyance or discomfort whatever, and its good effects persist after it is withdrawn. It will fail or lose its effect as every other remedy will fail or lose its effect in the treatment of such an unrelenting disease, but the proportion of failures is small compared with that of the successes.

You will ask for a comparative estimate between it and atropia. For immediate results ergotine is far inferior. If you see a patient in the morning, in whom you wish to prevent a violent sweating in the evening, there is no remedy which for promptness can compare with atropia; there is

moreover, no remedy which is so potent in cases where the skin pours forth quantities of fluid. But where such speedy and decisive action is not demanded, where you are obliged to keep up a remedy for some time, where to do so with atropia becomes very difficult or occasions first discomfort and then actual distress, you have then, in ergotine, an agent to which you can turn with confidence. Less prompt, perhaps less certain, it is better borne, and shares with atropia the valuable power of often making a durable impression. Nay, I have seen it do so when atropia has failed.

Gentlemen, I have now laid before you the results of a series of inquiries into a matter of deep and practical interest. In summing it up in your minds you will see that there are many articles, some of which do the work required of them well, other not so well. It is not easy to say which agent in a given case will succeed best, and you ought to be as accurately as possible acquainted with the action of many. Speaking generally there are remedies which act as astringents and as arresting the secretion; there are others which, under normal circumstances, promote perspiration and allay the morbid sweating, either because they substitute a normal discharge for an abnormal one, or, what is more likely, because given in small doses they tone up and gently stimulate to healthy action the sweat-centres and the respiratory centres. But, whatever the explanation, the latter class of remedies, Dover's powder, jaborandi, picrotoxine, are on the whole, greatly inferior to the former, and not so permanent. And it is permanency of action at which we must, as far as possible, aim. This gives time for the general treatment to take effect; it arrests a serious drain, and, what I have endeavored to show you in the case of several of the agents, if we once succeed in making for more than a very short period a decided impression, the annoying, dangerous symptom may be altogether relieved or at least forever broken in intensity.—*Medical News and Abstract.*

THE TREATMENT OF ACUTE RHEUMATISM.

By ALFRED STILLE, M.D.

The treatment of simple acute articular rheumatism may be abandoned to palliatives and nature. Apart from complications, such cases nearly always recover under rest and careful nursing. Try and disabuse yourselves of the idea that their cure is dependent upon medicines alone; to help nature is often the best we can do. No treatment was ever invented which stopped a case of acute articular rheumatism. It cannot be stopped by bleeding or sweating or purging, by nitre, by tartar emetic, by guaiacum, by alkalies, by salines, by salicylic acid, or by anything else. The physician can palliate the pain and perhaps shorten the attack, can control and perhaps prevent complica-

tions and stiffness of the joints, but he cannot arrest the disease. Where rest, proper diet, and warmth are enjoined, most cases will get well just as soon without as with the use of medicinal methods. Purgatives have been used in all ages in the treatment of this disease, because it was thought to be a fever. We are all but too ready to put our necks into the yoke of a theory. In old times they thought that the system ought to be reduced. Before the time of purgatives depletion was employed. This mode of treatment I will not even discuss. There is no evidence of which I am cognizant in favor of purgatives. There are very good reasons, indeed, why they should not be used: (1) Because they cannot possibly cure; (2) because they oblige the patient to make painful movements; and (3) because they expose him to the dangers of cold. There are certain cases in which purgatives are alleged to be of use, viz: those in which the bowels are constipated, and there is a bitter taste in the mouth. I have never seen such cases except in habitual drunkards, and in such patients a purgative does more harm than allowing the effete matter to remain in the system. Opium was once vaunted as a specific, and it was claimed that it diminished the tendency to complications in the course of the disease. More recent experience has shown that opium, of all remedies, is the most likely to cause heart complications. Some have recommended colchicum, arguing that because it does good in gout, it must, therefore, do good in rheumatism. But colchicum is not a remedy for rheumatism. Many years ago it was very much the custom to administer large doses of powdered Peruvian bark. The rationale of these large doses was founded upon their sedative effect. Never was there a more profligate waste of a precious medicine. I believe that it has also been fashionable in the so-called cases of hyperpyrexia to immerse the patient in a bath varying in temperature from 60° to 98° F. Although patients thus treated sometimes recovered, they also sometimes perished from congestion of the lungs and brain.

Among cardiac and nervous sedatives, digitalis, veratrum album and viride, veratria and aconite, have each, at one time or other, been employed indiscriminately. Such treatment, of course, has only proven itself to be a monument of rashness to those who employed it.

Within the last few years new remedies have been proclaimed in the shape of salicylic acid and its sodium salt. I confess that I possess no personal knowledge of their use in this disease, for I was at first dissuaded from employing them by a prejudice against the grounds on which they were recommended, and more recently by the contradictory judgments respecting them, and the unquestionable mischief they have sometimes caused.

It may be difficult to see the connection between blisters and alkalies in their power to influence the course of acute articular rheumatism, and yet it is certain that they do so influence it, and in

the same way, *i. e.*, by altering the condition of the blood from acid to alkaline. If you ask me to explain to you how blisters act in this way I am obliged to confess my ignorance. To produce this result they must be applied over all the affected joints. Experience, if not science, has decided conclusively in their favor. They do effect a cessation of the local symptoms, render the urine alkaline, and diminish the amount of fibrine in the blood.

This brings us to a consideration of the use of alkalies. Alkalies neutralize the acids, act as diuretics and eliminate the *materies morbi*. Alone, and in small doses, they are unable to influence the course of the disease; but when given in very large doses their effects are marvelous; the pulse falls, the urine is increased in quantity and becomes alkaline, and the inflammation subsides. The symptoms of the disease are moderated, the duration of the attack is shortened, and the cardiac complications are prevented. The dose of the alkalies must be increased until the acid secretions are neutralized. A very good combination of these remedies is the following:

R. Sodæ bicarb.....	3	iss.
Potas. acet.....	3	ss.
Acid. cit.....f.	3	ss.
Aquæ	3	ij.

S.—This dose should be repeated every three or four hours, until the urine becomes alkaline. On the subsidence of the active symptoms two grains of quinine may be added, with advantage, to each dose. The alkalies must be gradually discontinued, but the quinia continued. The diet should consist of beef tea or broth, with bread and milk; no solid food should be allowed. Woollen cloths moistened with alkaline solutions may, with advantage, be applied to the affected joints. To these laudanum may be added for its anodyne effect. The patient must be sedulously protected from vicissitudes of the temperature, and be in bed between blankets. The alkaline treatment relieves the pain, abates the fever, and saves the heart by lessening the amount of fibrine in the blood. A long time ago Dr. Owen Rees, of London, introduced the use of lemon juice. This remedy was thought to convert uric acid into urea, and to so help elimination. Though the treatment is practically correct, the theory of it is all wrong. Lemon juice does good in mild cases, but cannot be relied upon in severe attacks. During the febrile stage of acute articular rheumatism the diet should consist mainly of farinaceous and mucilaginous preparations, with lemonade and carbonic acid water as drinks. The cloths applied to the joints should be changed when they become saturated with sweat, and in changing them the patient should be protected from the air. The sweating may be controlled by small doses of atropia, from the $\frac{1}{6}$ to the $\frac{1}{3}$ of a grain. To prevent subsequent stiffness, the joints should be bathed with warm oil and chloroform, and wrapped in flannel cloths.

In the proper season the condition is very well treated by sea-bathing. There is no specific plan of treatment in acute articular rheumatism. The treatment pursued must vary according to the intensity of the inflammation and the peculiarities of the patients.—*Medical Gazette*.

TREATMENT OF SECONDARY PUERPERAL METRORRHAGIA.

By THEOPHILUS PARVIN, M.D.,

Professor of Obstetrics and Gynecology, University of Louisville. From Gynecological Transactions, Vol. V.

Uterine Compression.—The first impulse of the practitioner called to a case of puerperal hemorrhage is to place his hand upon the abdomen and ascertain the state of the uterus as to contraction or relaxation, not that commonly in secondary hemorrhage there is an accumulation of blood in the uterus, for usually this is an open, not a concealed, hemorrhage, but to secure, if need be, the final uterine hemostatic uterine contraction. Where compression is necessary the hand may be applied solely through the abdomen, or with one hand thus used and two fingers of the other hand making counter-pressure upon the posterior portion of the cervix.

The Tampon.—In the classic monograph of Leroux, written more than a century ago, it is stated that the most certain way of arresting uterine hemorrhage is by pieces of linen or tow dipped in pure vinegar with which the vagina is packed or sometimes these pieces are placed in the womb. Leroux asserts that the vinegar is both *antiputride* and *antiphlogistique*.

But may not the tampon convert an open into a concealed hemorrhage, and thus in no wise diminish, but rather increase, the peril of the patient, in that it induces a false security? The story which Baudelocque narrates is in point: A practitioner, whose patient was in danger by reason of puerperal hemorrhage, could find nothing at hand for a tampon; so he jerked off his wig, tore it in pieces, and thrusting them into the vagina arrested the external flow, but the internal hemorrhage was mortal—he had vainly sacrificed his wig.

Never tampon if the uterus can contain an amount of blood sufficient to endanger life, was the common teaching of our student days. Hervieux, as I have said, almost entirely denying secondary uterine inertia, admits mechanical distention. Practically the result is the same whether we attribute it to inertia or call it mechanical distention. The case of Madame Lachapelle and that of Dr. Maxwell prove that there may be complete uterine relaxation several days after parturition. Thus, then, if we obey the rule given a moment ago we must not use the tampon in most cases of secondary hemorrhage. But is the rule wise? McClintock used the tampon successfully in one case twenty-four, and in another twenty, hours after delivery.

When manual abdominal compression of the uterus is maintained the tampon can not be a dangerous, but will often prove a most efficient, means of treating a serious secondary hemorrhage.

Compression of the Abdominal Aorta.—This probably was first advocated in 1797 by Rüdiger, an obstetrician of Tübingen. His method was by the hand introduced into the uterus, pressing through its posterior wall upon the vessel. Ulsamer in 1825 made known the method of abdominal aortic compression; it was strongly indorsed in 1828 by Siebold, from his own personal experience; and Baudelocque was its warm advocate. Dr. Barnes reckons it only a momentary resource. But it will be remembered that in Duhamel's case, previously referred to, the compression was kept up five hours and was successful. Dr. L. Gros has given nine cases of puerperal hemorrhage in which aortic compression was successfully used. Very able theoretical arguments have been made against aortic compression, but stronger than them all is the simple fact that it has succeeded in some most serious cases. Of course, that it may be done efficiently the compression must be performed alternately by two or three, for the compressing hand needs rest after twenty or thirty minutes. However this method becomes less likely to be available the more remote the hemorrhage is from parturition, while the abdomen of the newly delivered woman is peculiarly favorable for it.

Uterine Injections.—Leroux states that Galen is almost the only one of the ancients who recommended them, and he further mentions his having thus cured a hemorrhage which had lasted four days. According to Leroux also, Prosper Alpinus, of the University of Padua, cured his wife of metrorrhagia by injecting the uterus with a decoction of Arabian acacia in wine. Andrew Pasta, 1750, advised, in extreme cases of uterine hemorrhage, injection of oil of turpentine, of nitric, sulphuric, or of hydrochloric acid, under the name of stimulants for uterine inertia. Then in the present century followed injections of the salts of iron, of gallic acid, of tannin, of cold water, of vinegar and water, of tincture of iodine, of alcohol and water, and finally of hot water.

It may be conceded that uterine injections carelessly given have been followed by the most serious consequences. But adopting a comparison used by a recent French writer in regard to another matter, must we reject the bistoury because it has been thrust into an aneurism for an abscess? So, too, it is known that injections into the uterus—iodine and tannin as well as iron—even when carefully made, have been followed by severe shock or by dangerous pelvic inflammation, or by death. But are we to renounce anesthetics because now and again, notwithstanding the wisest precautions, an anesthetized patient dies? Some risk may always be run whenever a great immediate peril is to be removed.

Granting, then, the propriety of uterine injections

in grave cases of puerperal hemorrhage, what shall we use? Cold water? It has the advantage of being always available, but, as a direct hemostatic, it is powerless, and only does good by inducing uterine contraction. Moreover, it probably must be used in considerable quantities, and the condition of a patient with her clothing and that of the bed soaked with water is by no means conducive to rest. Still more, the depressing influence of cold may in some cases be dangerous. Madame Lachapelle recognized such danger when the applications of cold water were merely external, remarking that these means ought always to be regulated by the violence of the accident and the forces of the patient, stating that a very feeble subject may be thrown into a mortal prostration by too great cold.

Shall we use hot water? Here again we have means generally available, and not likely to produce either the shock or prostration that cold may. But hot water as a hemostatic proves its utility more especially in cases when there is oozing from small vessels that have been cut or ruptured, and when it does good in the arrest of grave puerperal hemorrhage, this must be accomplished by exciting uterine contraction. In choosing between hot and cold water certainly the preference should be given the former.

But the injection oftenest used, and that which is regarded with the most favor, is of a solution of one of the salts of iron, the perchloride being that which has been especially advocated by Dr. Barnes, the great English representative of this practice. The only substitute for the iron injection that has been brought prominently before the profession is that of iodine. This, originally proposed by Dupierris, in 1857, has been ably advocated by Dr. J. D. Trask. But as Dr. Barnes said in reference to injections of iodine, in 1876, so it may be said now, "the amount of evidence is still too small to justify a decided opinion." At the meeting of the Obstetric Section of the British Medical Association, a year ago, Dr. Barnes reported a case where injections of iodine, then of hot water, failed to arrest a uterine hemorrhage, which yielded to the iron injection. The chief argument made by Dr. Trask against injecting a solution of iron is the production of septicemia, but in answer to this Dr. Barnes, whose experience as to this injection certainly is very great, declares that he has seen "no case in which septicemia could reasonably be traced to the practice."

The strength of the solution advised by Dr. Barnes is one part of the liquor ferri chloridi fortior to three of water.

Hervieux states that for several years he has been using, for puerperal hemorrhage, uterine injections by means of a sound with a double current; that having made them hundreds of times he has not had a single accident; and that caustic solutions injected with proper precautions have for their ordinary, if not constant, effect the arrest of the hemorrhage, either by causing uterine retraction or by coagu-

lating the blood at the place of exit from vascular orifices. The following is the formula for the iron solution he uses. It will be observed that it is stronger than that advised by Dr. Barnes, but rendered less irritating by the addition of sodium chloride :

Chlorure de sodium pur..... 15 grammes ;
Solution de perchlorure de fer
neutre à 30°..... 25 grammes ;
Eau distillée 60 grammes.

Let the precautions so strongly urged by Dr. Barnes be faithfully observed—such as completely emptying the uterus, whether of clots or placental fragments, of making the injection slowly and directly upon the bleeding surface, and of securing free exit from the uterus, and the perils attributed to the iron solution, either conjectural or actually observed, are prevented ; especially there can be no considerable clot to distress the patient, or by its subsequent breaking down become a source of septic infection, no fragment of placenta to produce a similar infection ; and these conditions were found in two of the cases terminating fatally which have been advanced against the practice. Where injecting the uterus is feared, the styptic may be used to saturate a sponge or portion of cotton wool, and this be carried into the uterine cavity and applied to the bleeding surface. This plan was resorted to by Schreier as early as 1854, and is highly commended by Dr. Wynn Williams, Winckel, and others.

Having considered the chief means resorted to for the arrest of dangerous puerperal hemorrhage, I shall briefly refer to some other means, less important indeed, but often of great value.

Cold.—Cold water poured from a pitcher upon the abdomen, after the manner of Gooch ; ice to the abdomen, in the vagina, in the uterus : flapping the abdomen smartly with the corners of a wet towel, as advised by Barnes ; ether-spray upon the abdomen as used by Broadbent and Hicks, etc. All these means do good if the irritability of the uterus can be evoked. But if that be lost by the exhausting flow, they are powerless ; and in no case should they be persisted in to the neglect of more powerful means, if the uterus makes no prompt response.

Ergot.—The stomach may be so irritable as to reject it ; and besides, the battle may be lost while waiting for the reinforcement to arrive, the patient die before the medicine is absorbed, especially as absorption is at its minimum in such prostrate condition of system. Finally, the same remark applies to this medicine as was made in regard to cold—dependent upon irritability, it is vain when irritability is lost. But it may be given hypodermically, and thus two of the objections are obviated. Especially may it be of great value to give them ergotine in sulphuric ether. Nevertheless I must believe that ergot is not so much needed in the fierceness of the fight as to assist in holding the citadel first won by other means.

Quinine.—Even in hemorrhages unassociated

with malarial fever, but which are periodical in recurrence, this agent is of the first importance. So, too, where there is no periodicity it is often useful.

Opium.—Its use in uterine hemorrhage dates at least as early as Hoffman, and it has been a great favorite with many prominent British practitioners. But opium is an agent for the after-treatment rather than for the time of the flooding. It relieves spasmodic uterine contraction ; it sustains an exhausted nervous system ; it secures rest. Collins gave it with a free hand, stating that he never saw any injurious effects from thirty to forty drops of the tincture administered every twenty to thirty minutes and continued until one hundred and fifty or two hundred had been given, while Barnes advises thirty or forty drops of Battley's solution once in two or three hours.

Hot Baths.—This treatment, suggested by Tannier, has been strongly advocated by Bailly, who includes secondary hemorrhage between the second day and one month after delivery. These baths are used only ten days or more after labor ; the temperature about 34° C., and the period of immersion varies from twenty minutes to half an hour. I am not sure that this method of treating secondary hemorrhage has been used in this country.

In conclusion, several other topics belonging to therapeutics of uterine hemorrhage might be presented, such as *position*, *transfusion*, etc., but I do not attempt an exhausted paper—a term that sometimes has a double application, application to the subject and to the hearers, and I shall be quite satisfied if by the valuable discussion which ensues it may be evident, adopting a comparison from Horace, that I was at least a whetstone.

MANAGEMENT OF THE SHOULDERS IN LABOR.

I have been led to write a short paper on the management of the shoulders in labor, for the reason that I discover that lacerations of the perineum very frequently occur after the safe delivery of the head. This accident has recently occurred to two of my friends in a single week. In both these cases the head had been safely delivered with the forceps. In one of them, indeed, I had myself assisted the gentleman in attendance in delivering the shoulder presenting anteriorly, and yet the perineum was torn to a considerable extent in the delivery of the remaining shoulder. This looks like faulty midwifery, yet we are told by all the authorities on the subject that such instances are of very common occurrence. Any suggestion, therefore, which tends to obviate this unpleasant accident must, it seems to me, have a practical importance.

I have never met with a case of ruptured perineum in my own practice, which embraces two thousand midwifery cases. I do not know

whether this is owing to good fortune or to the means which I invariably adopt in all cases which I am called on to attend. Of course I have met with slight lacerations of the fourchette, but not of sufficient seriousness to require surgical interference.

In the "Transactions of the Medical and Surgical Faculty" for 1877, there will be found an article of the writer on the management of the perineum during labor. In that article I mention the various means necessary to be employed to protect its integrity. I there state that the proper plan is, before the head actually commences to impinge on the soft parts, to pass the finger round the whole surface of the perineum, inside, during the pain, and attenuate the tissues by drawing them downwards and backwards. This kind of *massage*, so to speak, is of great service in preparing the perineum for the severe strain it is about to undergo. When the pains are of a violently forcible character it is necessary, of course, to guide the head and control its movements; but if the soft parts be properly prepared in the manner I have suggested, the perineum may be readily slipped under the chin, and the term of the labor thereby greatly shortened. I might now suggest, in addition, the proper management of the glottis and the extension of the left leg at this stage to produce relaxation of the sphincters. The abduction and flexion of the limbs are proper until the soft parts are completely stretched; then the extension of the left leg adds to the safety of the perineum by its relaxation and the increase in the degree of its inclination. These remarks apply more particularly to the management of the head, but they also have a bearing, as you will see hereafter, on the delivery of the shoulders. At great rest usually takes place after the delivery of the head, particularly in primiparæ. The young obstetrician at this stage awaits anxiously for a renewal of the pains and sees with horror the face of the child becoming livid. Fearful for its safety, he immediately commences to pull on the head forcibly downwards and backwards. A sudden and violent pain is excited by his efforts; the sphincters contract and the shoulders are suddenly expelled, tearing the perineum in their rapid course. I have seen this occur in the Rotunda Hospital, Dublin, and also several times in this city. It is not good practice at any time to draw upon the head. Among other *contre-temps*, I have seen the head torn away from the body by futile efforts to deliver the shoulders in this manner. The proper plan after the delivery of the head is to rotate the shoulders in the reverse direction to that taken by the face, so as to bring them into the opposite oblique direction to that of the head. This rotation can be assisted by placing one hand upon the back of the neck and another upon the sternum as the shoulders are about to pass. The better plan, however, and the one I always adopt in cases of primiparæ, is to deliver each shoulder separately. After the

proper rotation of the shoulders, which should be done very gently, I pass two fingers up into the axilla of the arm presenting at the pubis, gently depressing the head in this movement. I then raise the head up towards the abdomen of the mother, and in a like manner deliver the remaining shoulder. The first shoulder should, if possible, be delivered before the pains re-commence, after the delivery of the head. If I do not succeed with two fingers I do not hesitate to pass the whole hand and draw down the arm. This is sometimes a little painful to the mother, but it invariably saves the perineum. The great frequency of rupture of the perineum by the shoulders is due to the fact that they are too often disregarded in the management of the labor. The head being delivered without injury to the soft parts, the accoucheur thinks all difficulty is over; but this is a very great error. The shoulders form abrupt stumpy projections which are very apt to cut the attenuated parts if not properly watched and controlled. I have not, in what I have written, given any attention to the treatment of those cases in which the great size of the shoulders arrests the delivery before the head is born, for the reason that this branch of the subject has been ably treated by a French gentleman, M. Jacquemier, in an excellent paper published some years ago.

I have spoken of the proper management of the glottis as a means of saving the perineum. Tyler-Smith is the only author who dwells sufficiently on the importance of this matter. The more outcry the woman makes at the terminal stage of labor—that is when the head and shoulders are about to pass—the better. The extreme dilatation of the glottis adds to the safety of the perineum by the relaxation of the sphincters which it produces. The woman, therefore, should be encouraged to cry out at this crisis. Her very distress seems to be the means devised to save her from future injury.

Unfortunately, in our times, it seems that more pains are taken to look for injuries to the perineum than to guard against them. The whole system of midwifery formerly taught in the schools has been reversed by modern practice. The gynecologist appears to have taken the place in a great measure of the obstetrician. Women are now turned up and examined immediately after delivery in the search for lesions of the *genitalia*. I was greatly surprised at a meeting of the Obstetrical Section of the Medical and Surgical Faculty, last week, to discover that this practice is the unvarying rule of every member who was present. The old masters of midwifery would have looked with horror upon procedures of this character, and I beg leave, as one of their pupils, to protest earnestly against this unnecessary, if not indelicate, innovation.—*John Morris, M.D., in Maryland Medical Journal.*

EPISTAXIS IN CHILDREN.

By F. FORCHHIEMER, M.D., Cincinnati, Ohio.

Epistaxis is a symptom occurring, with great frequency, in children past the age of ten years. Its causes are numerous and manifold; for convenience of study they may be divided into remote and local. The remote causes are to be sought for in the condition of the circulation and the blood. The local, in the condition of the mucous membrane and its blood-vessels. The circulation, especially its force, causes epistaxis, simply by producing rhexis of vessels; thus, in heart disease, by an increase of pressure either in the arterial or venous circulation; during attacks of whooping-cough, on account of impairment in return of the blood to the right side of the heart, the pressure in the veinules becomes so great that they are ruptured. In febrile diseases, measles, typhoid, either increase or pressure of diseased condition of the vessels may be the cause, in all probability the latter, for in some diseases, although accompanied by enormous fever, epistaxis is by no means common, so that, perhaps the poison circulating in the blood has already had time to affect the structure of the blood-vessels. All poisons of the blood can cause epistaxis, acting suddenly or slowly, and they do this not only by virtue of their affecting nutrition, but also on account of a change in the blood itself, causing the latter to change its physical and biological properties, and in this way producing transudation of the blood. But anæmia and plethora are accepted as causes of epistaxis. The former, in children, is by all means the more common cause: its action, as well as that of scurvy or purpura, must evidently be referred principally to the changes produced in nutrition, especially of the blood-vessels. Anæmia, again, in the majority of cases, is simply a symptom, and it is by no means uncommon for us to find children made anæmic by going to school, swallowing iron by the quantity, bleeding every day, becoming still more anæmic, but, the cause not being removed, going from bad to worse, and, finally, being compelled to cease school from weakness, perhaps sent into the country and being cured in a short time. And so the many causes of anæmia may produce epistaxis, this, in its turn, increasing the anæmia, and circulus vitiosus being established, the patient may suffer seriously until the true cause is discovered and removed. The local conditions producing epistaxis are very numerous; nasal catarrh, ulcers, neoplasms, wounds caused by picking at the nose are the most common. From this it will be seen that it becomes of utmost importance in cases of epistaxis to examine the cavity of the nose. In older children both the posterior nares can be examined carefully. In younger children, however, only the anterior nares can be looked into; but these can be seen with perfect satisfaction. For this purpose it is not necessary to be the possessor of any expensive instrument in the form of a rhinoscope, any ordinary ear speculum being

sufficient to make an adequate examination of the anterior nares. Indeed, with the exception of rare cases, this is sufficient, for in the anterior nares do we most commonly find the local cause of epistaxis. According to my experience, this is usually one or more ulcers, situated low down upon the septum. These ulcers may be caused by catarrhal processes, or they may be the result of a trauma. In either case they are slow to heal, and during their presence the patient has repeated attacks of epistaxis. Cases have occurred in my experience in which these ulcers are present, but epistaxis does not occur, this condition being due either to the fact that they do not involve any blood-vessels, or that they are so protected that an epistaxis cannot arise. But given a case in which both the ulcers and epistaxis are present, a single treatment of the ulcers usually does away with the epistaxis. When epistaxis is due to constant picking it becomes absolutely necessary to use both moral and physical restraint. It rarely becomes necessary to tie the hands of these little patients, but this measure should certainly be resorted to when the bleeding is excessive. The treatment of epistaxis is that of its causes. The general causes must be seen to; indeed it is most important to detect them, as without them no rational therapy of epistaxis can exist. It is my intention to refer briefly only to the treatment of nose-bleeding from local causes. Nasal catarrh is best treated in children by remedies that can be applied by the parents. Boracic acid in the form of a 2½ per cent. solution in water, or in the same strength mixed with vaseline, gives very acceptable results. This is to be applied to the anterior nares, and allowed to flow into the pharynx. Sulphate of zinc, in one-fifth per cent. solution in glycerine and water, applied in the same way may also be used to advantage. The greatest care should be taken in detecting ulcers, and when found it is necessary simply to touch them with the mitigated stick of nitrate of silver, and the bleeding stops instantly, in many cases never to return. In other cases repeated applications are necessary; even when there seems to be present a marked condition of anæmia, these ulcers must be treated, as frequently the ulcers are the cause of the anæmia, the link being the constant loss of blood from the nose.—*Cincinnati Lancet and Clinic*.

ANGELS' WHISPERS.

The beautiful nursery conceit that the sweet smile of the slumbering infant is caused by the whisper of an angel into its ear is destroyed by the revelations of unemotional science. Dr. Charles Bell attributes the smile to reflex muscular action due to intestinal flatus, the rotation upwards of the eyeballs, and the tremulous movement of the lips being due to a far different cause than a communication from the unseen world.—*Cincinnati Lancet and Clinic*.

COUGH AND ITS LOCAL TREATMENT.

By LOUIS ELSBERG, M.D., Professor of Laryngology and Diseases of the Throat in the Medical Department of the University of New York.

Among the subjects of interest to every physician, cough certainly holds a prominent place. Since the introduction of the laryngoscope much positive information has been obtained as to its frequent seat, and sometimes simple cure. But this knowledge seems not to have reached as yet the profession at large. Without by any means exhausting the subject, I desire to call attention to a point or two.

We know cough to be a reflex action for the expulsion of foreign matters from the air-passages. Accumulation of matter, such as mucus, etc., or, in fact, irritation in different portions of the tract, may cause it. Its most frequent cause is irritation at the upper aperture of the larynx, especially its posterior portion: namely, the inter-arytenoid fold, and also the free edge of the epiglottis. Here both action and reaction are at work; an irritation of this locality, as, for instance, an erosion of the mucous membrane, is apt to produce cough; and cough from any other cause is apt to produce such an irritation. Each of these two factors, cough and this irritation, can produce the other; when both are present they make each other worse.

Irritation lower down in the respiratory passages, namely, at the posterior wall of the larynx and trachea, the bifurcation of the bronchi, and the mucous membrane of the bronchial tubes, can also produce cough, while it seems irritation of the parenchyma of the lung itself and of the pleuræ cannot. The fact is that usually the cough, accompanying pulmonary and pleural disease, comes from associated bronchial, tracheal or laryngeal complication. On the other hand, although it would not be true to say that there is no cough-producing spot above the larynx, yet even nasal or pharyngeal catarrh and elongated uvula frequently excite cough only by the irritation of the upper laryngeal aperture, by the descending secretion in the one case, and the relaxed extremity of the uvula in the other, either directly or indirectly. The remote causes, as in hysterical and nervous cough, ear cough, so-called stomach cough, etc., act by influencing the motor reflexes, sometimes by means of the independent sensory center (the existence of which clinical observation, as well as anatomical reasons, have led me to assume), often, I believe, with implication of the vaso-motor nerve.

At all events there can be no doubt that the great majority of all persons who cough primarily or else secondarily, an irritation at the upper aperture of the larynx, either its posterior or anterior portion, and local treatment of this irritation, sometimes of the simplest kind, relieves (sometimes cures) them.

Almost any physician worthy of the name may, with an expenditure of less than an hour's time, and not much more than a dollar in money for the

purchase of a laryngoscopic mirror, learn to inspect his own or another's larynx. : can, therefore, find no excuse for the omission, in a case of cough, to use the laryngoscope. If a good view of the aperture and interior of the larynx be obtained, the physician may recognize any structural lesion present, and should either himself or let some one else treat it. Sometimes conditions exist which no local treatment can reach, sometimes the condition may require measures that cannot be expected from a general practitioner; but, aside from any other affection, there will very frequently be seen erosion, fissure, or ulceration of the inter-arytenoid fold, or erosion of the epiglottis, which every physician ought to be able to relieve.

With the laryngeal mirror in the left hand, the patient holding his tongue out himself, the physician should with his right hand, by means of a piece of soft sponge fastened in the sponge-holder, apply to the affected part a saturated solution of iodoform in sulphuric ether (one part of crystalized iodoform to four parts of ether dissolved by simple agitation, kept away from the light, and flavored with a little oil of wintergreen or musk). There should be no dropping from the sponge, therefore it had better be squeezed out before the throat is touched with it; and there should be no slobbering, therefore the physician ought to acquire some dexterity in practicing on a model before making an application to a patient. The use of the iodoform solution may be repeated every day or every other day for a week or more. Sometimes other applications may be needed in the proper treatment of the case, but the iodoform will, in almost every instance, contribute something to the relief of the patient.—*Chicago Medical Review.*

ASPIRATION OF THE GALL BLADDER.

P. H. Kretschmar presented to the society a paper on dilatation of the gall bladder; its treatment by aspiration. The object of the paper was to call attention to the surgical treatment of dilatation of the gall bladder from whatever cause produced. In looking over the literature of the subject he found very little in the works of the leading authorities.

He considers the use of the aspirator in cases of enlarged and distended gall bladder as perfectly safe, and therefore an operation that may be resorted to as soon as the diagnosis is made out; or one that may be utilized for the purpose of completing a diagnosis.

He reports a case in which the patient was aspirated five times, and thirty-four and a half ounces of bile were removed within a month. At every operation the patient felt much relieved, and after the first operation the constitutional symptoms were much diminished in severity. Of course, this surgical interference did not take the place of, it only supplemented, the medical treatment of the case.—*Proceedings of Medical Society of County of Kings, Sept., '81.*

THE TREATMENT OF ABORTIONS.

By GEO. T. HARRISON, M.A., M.D., Assistant Surgeon to the Women's Hospital in the State of New York.

The immediate consequence of an abortion may be such excessive and exhausting hemorrhage as to cause the speedy death of the patient. Septic infection also may follow rapidly upon an abortion and carry off its victim.

Our therapeutic endeavors should, therefore, be directed to a prevention of hemorrhage, or, at least, to its limitation within bounds consistent with safety to the patient—to the avoidance of septic infection and its consequence—and especially should it be an object of our earnest effort to secure perfect involution of the uterus.

The bleeding is the first symptom usually which demands our therapeutical intervention. What that shall be will depend on the result of our examination per vaginam, which should be made at once, the patient being in the dorsal position, with the knees flexed. If it should now be found that the os uteri is but slightly open and the cervical canal therefore not accessible to the exploring finger, the best thing to do is to apply a vaginal tampon. The tampon arrests the hemorrhage and stimulates uterine contraction, and fulfills the indication completely. To proceed at once to the use of dilatation, whether gradual by the tent or rapid and forcible by the several mechanical contrivances of late devised for this purpose, is unjustifiable in view of the unnecessary dangers to which the patient is thereby subjected from septic infection consequent upon the injury to the uterine tissues which that treatment may cause. For the tampon there is nothing superior to absorbent cotton, each piece being dipped in a solution of carbolic acid (two and a half per cent.) and well wrung out. It frequently happens after the tampon is removed in from six to twenty-four hours, that the ovum is found in the cervix or in the vagina. In the first case it is usually an easy matter to remove it by the finger. In the second, the scene of course is ended. It happens, however, now and then, that though the ovum has descended into the cervix partially or entirely, yet the external os remains undilated, and presents an insuperable obstacle to the passage of the finger. In these circumstances Schröder advises the incision of the os and cervix on each side to a greater or less extent. The ovum is then readily extracted manually. The divided surfaces are immediately united, observing strict antiseptic precautions. I concur fully in the view of this distinguished author, that such procedure is better than forced dilatation.

A method of removing the ovum, applicable especially in the first three months of pregnancy, was suggested by Hoening. It consists in expressing the ovum out of the uterine cavity instead of extracting it. Two fingers of the one hand are introduced into the vagina and applied against the uterine body in the anterior or posterior fornix vaginæ, according to the position of the uterus,

whether ante or retroverted, while the other hand, from the abdominal walls, presses the uterus against these fingers. The ovum is forced into the cervix and then slips immediately into the vagina. I cannot commend this procedure too highly. I have practiced it with great satisfaction.

If the physician, however, on reaching the bedside of the patient, ascertains that the membranes have ruptured and the liquor amnii has escaped, active interference is called for—the clear indication being to remove the uterine contents as speedily and completely as possible.

Without entering into any elaborate argument, it is sufficient to say that where portions of the ovum are retained in the uterine cavity, there is always menace of putrefactive decomposition and absorption of its products involving a long train of morbid sequences of hemorrhage; and especially is defective involution thereby a frequent result.

The measure which I would warmly commend, and which I have used for years with entire satisfaction, for the expulsion of the retained ovum, is the intra-uterine injection of hot water, made antiseptic by the addition of carbolic acid or salicylic acid. The patient lies on her back across the bed, with her hips near the edge, with a bedpan placed beneath her. The physician then takes a Davidson's syringe and attaches to its nozzle, by a piece of rubber tubing, a flexible male catheter. With the forefinger of one hand in the vagina, this can be readily guided into the os externum and thence into the uterine canal, taking care to expel all air in the first instance. It is important, of course, that the uterine canal should not embrace the catheter too closely, as there ought to be sufficient space for the free escape of the water pumped in. The first attempts should be exceedingly cautious, and the water must not be thrown in under too great a pressure. The hot water acts in two ways—partly mechanically and partly by stimulating the uterus to energetic contraction.

It is but right to state that this practice is condemned by one eminent authority, Dr. Carl Braun. The admonition of so eminent an authority is worthy to be well weighed. I believe his apprehensions, however, are groundless, if the canal is open, as it almost always is soon after the escape of the foetus (and these are the cases we now have in view), and if, moreover, we are careful in making the first injections. The hot water soon relaxes any constriction or tendency to spasm at the internal os, and its escape from the uterine cavity is thus facilitated. It is also important to introduce the index finger of one hand (the left by preference) into the vagina, when making the injection, and press back the posterior wall from the os externum to still further promote the free discharge of the water. This finger will also detect the presence of pieces driven into the cervix as far as the os externum. Withdrawing the catheter now and using bi-manual manipulation, the uterus can be depressed so as to allow the

finger in the vagina to pass into the cervical canal and remove its contents—the finger acting as a hook. The hot-water injections can then be again employed until other portions are either driven into the cervix or forced into the vagina. Even if all the portions of the ovum are not expelled now, the hot water arrests all tendency to hemorrhage, and in the course of the next twelve or twenty-four hours can again be called into play. After finishing the injection, a pledget of absorbent cotton wrung out of a $2\frac{1}{2}$ per cent. solution of carbolic acid and saturated with glycerine, is placed against the os externum. If we have succeeded in cleaning the uterus of its contents, we need not use the injections the next day; but if there is any uncertainty they should be given. It is a matter of importance that no fluid should be left in the uterine cavity, as violent uterine colic might otherwise ensue; therefore, in withdrawing the injection tube (or catheter) the hand above the pubis should grasp the fungus through the abdominal walls and force out its contents.

If the membranes have ruptured some time before the physician is summoned, and the cervix has closed so as not to allow the passage of the finger, I would most earnestly advocate the use of chloroform or ether, as Dr. Fehling and others suggest. It is then easy, as a rule, to pass the finger through the internal os and attain to the uterine cavity; so that by means of the co-operation of the other hand—acting through the abdominal covering—in bringing the uterus within easy reach of this exploring finger, the retained parts may be readily removed, either partially or entirely. In the first case, the hot-water injections are invoked and speedily complete the expulsion of the uterine contents. Those who have never made use of it will be astonished at the relaxing power of the anæsthetic, for the finger gains admission through an internal os under its influence, where before it seemed rigidly closed. It need hardly be said that the facilities afforded for bimanual investigation are thereby greatly enhanced.

We have seen that one important indication of treatment in abortions is to secure perfect involution. In the use of intra-uterine injections of hot water we have a therapeutic measure at our command incomparably superior to any other in effecting this result. Since I have appreciated their power I have never had occasion to use ergot. It is certainly a matter for congratulation to be able to dispense with the use of so nauseous a drug, and one which, no matter how administered, is apt to cause disagreeable symptoms. I would therefore most earnestly deprecate the practice of those who find an exponent of their views in the French author Cordes, who will wait, even when the placenta has undergone putrefactive decomposition, for the uterus to expel its contents spontaneously, and rely upon the internal administration of ergot and quinine to stimulate uterine contractions. Under such treatment, I have seen a patient, the subject of a metrorrhagia, protracted

a year subsequent to the abortion—the uterus in a condition of sub-involution requiring a long course of treatment for its relief. In some cases, the physician does not see the patient who has aborted until a number of days have elapsed after the expulsion of the foetus, and the os-externum and cervical canal are completely closed. Under such circumstances, we must first dilate with tupelo or laminaria tents, first making them thoroughly antiseptic, and then proceed as before with the hot-water injections.

An important practical question is this: Suppose, in a case of retention of the ovum or its parts, high fever or septicæmia or perimetritis develop, shall we have recourse to active interference or not? Active interference is here, undoubtedly, the proper course to be pursued, and the one which I have invariably adopted with perfect satisfaction.

It is not necessary to insist upon the value of the use of the vaginal douche of hot water, repeated several times daily, and continued for at least two weeks after the abortion.—*Virginia Medical Monthly*.

OBSTETRIC APHORISMS.

By H. WEBSTER JONES, M.D., Chicago.

1. An intelligent confidence once thoroughly established between patient and physician does much to banish the terrors of the lying-in room.
2. It is possible to foresee and prevent the occurrence of the almost fatal form of eclampsia gravidarum.
3. Cleanliness is especially next to godliness in the case of the accoucheur. Its absence renders one liable to professional homicide.
4. The modern midwifery must not be meddling, but must be mediatorial in the sense of palliating suffering, expediting nature's processes by well-proven means, and removing scientifically all inexplicable, accidental or morbid states and conditions. Idleness is no longer an approved qualification for a degree of obstetrics.
5. The hand is the best uterine dilator.
6. The forceps should never be employed until the os uteri is dilated or dilatable, and then not unless the membranes have been ruptured and labor delayed unnaturally for at least an hour. Every practitioner should become skillful in their use, and they should never be left at home for fear of temptation.
7. Unnecessary and avoidable delays in labor are fruitful sources of gynecological practice. They promote inflammation and sepsis.
8. The patient's hopeful confidence and the physician's industrious attention, actually contribute to the physiological elements of labor. Anæsthetics here, are, to say the least, superfluous.
9. Bi-manual aid in effecting the deliverance of the placenta is not only proper but advisable.

Skillfully rendered, the cry of "uterine inversion" becomes no longer a bug-bear.

10. The continuous and intelligent counter-pressure over the fundus uteri during the child's exit, the delivery of the placenta, and the period of frequent oscillation, be that a shorter or a longer time, is a safeguard never to be neglected.

11. Pursuant to the same end, the application of the bandage and its continuance, as long as the uterine globe can be felt and embraced by it above the pubis, contributes not only to comfort, but to speedy involution. After the seventh day close pressure must be interdicted.

12. Puffiness of one ankle, with tenderness of the corresponding groin, and an abnormally quickened pulse, with or without copious sweating, noticed within the first ten days after labor, betoken the presence of phlebitis, and the possibility of embolism or thrombus, and resultant sudden death.

13. The duties of an obstetrician are not concluded until a careful examination, from six to eight weeks after parturition, proves the integrity of all the organs concerned.—*Michigan Medical News*.

OVARIAN IRRITATION AND PAIN, ASSOCIATED WITH CERVICAL INFLAMMATION.

A class of cases which may be approximately described by the foregoing heading, will be recognized by practitioners as exceedingly vexatious and unyielding to treatment, local or general. In response to some inquiries made to our correspondent, Dr. Herrick, of Grand Rapids, we have received the following suggestions:

"As for the cases you mention, I think all of us are more or less puzzled to always treat them properly. I, as well as you, often meet with *chronic ovaritis* complicated with cervical engorgement, and in addition to the treatment heretofore mentioned (see *July Gazette*), I pack the upper portion of the vagina with cotton saturated with an ointment, composed as follows:

R. Vaseline..... ʒ iij
Chloral hydr..... ʒ i
Ol. erchthites..... ʒ ss
Fl. ext. hamamelis.... ʒ iss

And to this I sometimes add—

Tinct. iodine..... ʒ ss

These should be thoroughly incorporated in a mortar.

This applied against the inflamed organ will often quiet the pain.

Besides this, I have sometimes thought I got the benefit from a blister over the outside of the ovary. Where the trouble arises from neurasthenia, bromide of ammonium is the sheet anchor. But, as a general rule, the ovarian irritation will subside with the cure of the uterine trouble."

Upon being asked what advantages were to be

had from the addition in this formulæ of the fire weed and witchhazel, the doctor says:

"Fire weed (*erchthites*) was suggested to my mind from its being used in uterine hemorrhage; it is supposed to act like ergot in one respect, i. e., by contracting the capillaries, but it does not possess the other power of ergot, that of producing contraction of the muscles of the uterus. Of course if it produces contraction of the capillaries, it will help expel the blood from them, and will consequently lessen congestion and inflammation. This at least was my theory; and in my hands it has been borne out in practice, for I have noticed that cases improved faster after the fire weed was added to the ointment. I always use the oil, as it can be more easily mixed with the vaseline. As for the witchhazel (*hamamelis*), I make no claim of priority in local application, for it has been used for some time in leucorrhœa, ulceration, etc., I believe. To the homœopathic lights belong the credit of discovery; they have used a very dilute form of *hamamelis* in all forms of uterine disease for a long time, both as a local application and internally in the form of a 800 or 3,000 potency, according to the sense of the person prescribing. Our profession commenced the use of the drug in the shape of the fl. ext. and tinct. within the past four or five years, but only as a local application; and that it has some influence over the inflamed uterus and vagina, is now pretty well established from the fact that it is used now more or less by almost all gynecologists. Just what its '*modus operandi*' is I do not know; our materia medica does not say anything about its effects over these parts."—*Obstetric Gazette*.

IODOFORM IN UTERINE AND CATARRHAL DISEASES.

Dr. Fowler, of Youngstown, Ohio, makes a pliable mass for iodoform by mixing it with isinglass and glycerine. The isinglass is reduced to a jelly with steam, and enough glycerine added to give it consistency and pliability. The proportions are about as follows:

R. Iodoform..... 3 i.
Isinglass..... ʒ viii.
Glycerine..... ʒ iv.

—*Medical Reporter*.

CHRONIC ECZEMA OF THE PALM.

The following lotion I have found very beneficial in allaying the intense irritation which so often accompanies this common skin disease. It consists of bicarbonate of soda, 2 drachms; bicarbonate of potash, 1 drachm; glycerine, 1½ drachms; tincture of opium, 2 drachms; water to 8 ounces. I was at first induced to use it in a case of eczematous irritation, in which every application I had used proved of no avail, on account of the marked relief from pain which the local use of the bicarbonate of soda frequently gives in severe burns. On-

ly a few days ago in the case of a lady suffering from chronic eczema of the legs, accompanied with intense itching, I used it with the most beneficial and immediate result, the patient showing me some half-dozen prescriptions which she had used with little or no success. I consider the bicarbonate of soda lotion almost, if not quite, a specific for the relief of the intense burning irritation which often attends chronic eczema, more especially if the patient have a rheumatic tendency.—*Dr. J. W. H. Lush, British Medical Journal.*

THE CANADA MEDICAL RECORD,

Monthly Journal of Medicine and Pharmacy.

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MONTREAL, MARCH, 1882.

CORRECTION.

In our January number we published a case of Acute Tuberculosis by Dr. McConnell in which several printer's errors will be discovered, and which were overlooked in the correction of the proof. As the writer has called our attention to these mistakes we would request our readers to make the following alterations so that the article may read properly, and as the author intended it should.

In column 2, line 15, for "twisted" read "turgid"; in line 22, for "full note" read "dull note"; line 26, for "skin" read "spine." In column 3, line 45, for "disappearing" read "appearing." In column 4, line 1, for "extracted" read "retracted"; line 26, for "*trachea cerebral*" read "*tache ecrebral*."

COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC.

We direct attention to the advertisement to be found in this issue, giving the date of the meeting of the Preliminary Board and of the Board of Governors.

THE LATE DR. KENNETH REID.

We deeply regret to learn, from the New York *Herald* of the 23rd February, of the death of our personal friend and old subscriber, Kenneth Reid, M.D., a native of Huntingdon, Chateauguay County, after a short illness of four days, and in the 42nd year of his age. Dr. Reid was the eldest son of Col. Reid (retired), formerly of the 78th Highlanders. Before adopting the profession of medicine the deceased held an appointment in the Montreal Post Office, for which he was nominated by Sir John Rose. In 1864 he graduated at the McGill University of Montreal. He then went to Edinburgh, where he passed the Royal College of Surgeons. In 1869 he came to New York, was appointed a deputy health officer at Quarantine, and served for two years under Dr. Swinburne. He retained his position during the whole of Dr. Carnochan's administration, and by his rare lingual ability, as well as by his medical skill, proved a most valuable official. After this he made a tour in the Holy Land, and returning again to New York, established himself in practice. Dr. Reid was connected with the Ophthalmic Hospital, and was a member of the Medical Society of the City and County of New York. His disposition was so amiable that it endeared him to all who knew him, and the ability he displayed in the practice of his profession had already given promise of a brilliant future had his life been spared.

TONGA.

Parke, Davis & Co., of Detroit, Michigan, the well-known manufacturers of therapeutic remedies, have just scored a triumph upon behalf of legitimate Pharmacy. The circumstances are briefly these:

Tonga is a compound of barks prepared by the natives of the Fiji Islands, and has borne in that locality for years the reputation of being an effective remedy in the treatment of neuralgia. A quantity thereof was brought to London in the year 1879 by a Mr. Ryder, who placed the same in the hands of Allen & Hanburys, druggists, London, in order that it might be introduced properly to the medical profession. The first information relative thereto which was published to the public or to the medical profession appeared in the shape of an article in the London *Lancet*, March 6, 1880, and March 20, 1880, as a communication from the pens of Drs. Wm. Murrell and

Sidney Ringer. Following this article were others of a similar nature in the *Lancet*, and one in the London *Pharmaceutical Journal and Transactions*, April, 1880, from the pen of Dr. Holmes, on the "Botanical Origin of Tonga." Believing that Drs. Murrell and Ringer would never have investigated and published the result of their investigations of any drug without it was free from any contamination of a proprietary nature, Parke, Davis & Co. assumed that Tonga was common property. Acting on this assumption they dispatched a special messenger to the Fiji Islands, 7000 miles south-west of San Francisco. After a sojourn of six months he returned to Detroit in December, 1880, bringing with him a large supply of the drug. They at once put on the market a fluid extract of it, and advertised it extensively in the Medical Journals. Soon, however, they were notified by Allen & Hanburys, of London, to discontinue the use of the word "Tonga," as it was a registered trade mark. This Parke, Davis & Co. declined to do, upon the ground that the name was that of a geographical locality, and therefore not patentable in the United States, and that the *only* name of an article, being the only specification by which the article itself is known or described, is the common property of all, and cannot be appropriated by any one individual to his sole and exclusive use. They, moreover, claim that the word "Tonga" is the name of a medicinal compound used by the natives of Peru. Not satisfied with this reply, the London firm, through their agents, Messrs. W. H. Schieffelin & Co., of New York, took out an action against Messrs. Parke, Davis & Co. to restrain using the word "Tonga." The case went to suit, but as soon as the defense proved by two reliable witnesses that the word "Tonga" had long been known and applied both to natural products and medicinal preparations, the complainants on their own motion obtained an order of court to dismiss bill of complaint, with costs to be defrayed by themselves. We congratulate Parke, Davis & Co. on their triumph; they deserve the thanks of the profession for the stand which they took upon behalf of legitimate pharmaceutical preparations, the manufacture of which should be open to all pharmacists.

W. R. WARNER & CO.'S PREPARATIONS.

We have more than once felt it to be our duty as well as our privilege to speak most favorably of the pharmaceutical preparations made by William

R. Warner & Co., of Philadelphia. Our acquaintance with this firm justify us in giving to them an extended notice. The value to the physician of the pharmaceutical products of a known standard and value cannot be over-estimated. We have so many tinctures, extracts, pills, granules, and preparations of every description that are either wanting in strength or care of preparation, that the results obtained are disappointing to the practitioner, that when we find a reliable house they deserve encouragement. Wm. R. Warner & Co. have expended large sums in procuring and testing the value of new remedial agents; they have one of the finest and best equipped laboratories in the country, and were the first to introduce many of the recent preparations which have become of so much value, not one of which has failed to be of use. We have been using their different pills with great success, and heartily recommend them to the profession. The manufacturer of chemicals and pharmaceuticals, in these days, must make the most strenuous efforts in order to be in the advance which is constantly being made in the discovery of new agents, new methods of preparation, and their introduction under special and careful instructions to practitioners.

PERSONAL.

Dr. Mewburn (M.D., McGill, 1881), late clinical assistant in the Montreal General Hospital, has accepted an appointment as House Surgeon to the Winnipeg, Man., General Hospital, and has left Montreal to assume his duties.

Dr. Wilkins, Professor of Physiology and Pathology in the Medical Faculty of Bishop's College, has been appointed Examiner in Physiology and Pathology at the University of Toronto for the ensuing term.

Dr. Davis (M.D., Bishop's College, 1875) is resident assistant Surgeon in the Colonial General Hospital, Georgetown, Demerara.

Dr. Eneas (M.D., Bishop's College, 1874), after spending his leave of absence in Montreal, has left to resume his duties at Wakenam British Guiana.

Dr. W. C. McGillis (M.D., Bishop's College, 1881) is now on en route to Bakna, Java, Netherlands, India, a Dutch possession, where he intends to locate and practice.

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MONTREAL, APRIL, 1882.

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Progress of Medical Science.

OPHTHALMOLOGY FOR GENERAL PRACTITIONERS.

By F. TIPTON, M.D., Selma, Alabama.

One of the most frequent mistakes with physicians is to treat every form of conjunctival hyperæmia with astringents; and often, without investigation, the patient is sent away with a lotion of zinc, or, worse still, of lead, for a *phlyctenular conjunctivitis* or an *iritis*, where a very different kind of treatment is needed, and where astringents, particularly lead, are positively hurtful. A little care is needed, and only a very little, to distinguish simple from phlyctenular or strumous conjunctivitis. Thus in phlyctenular inflammation, the eyes weep more, light is painful, the eye improves toward evening as the light fades. The little phlyctens or ulcers can be seen scattered over the conjunctiva—perhaps on the corners—forming little red congested areas, differing from the uniform diffuse redness of catarrhal conjunctivitis. This irregular injection is quite characteristic, and should be looked for in all cases in children.

The disease is almost always confined to childhood, especially when occurring for the first time. Catarrhal conjunctivitis, on the contrary, is worse at night; the redness is uniform, the cornea is seldom affected, there is little pain, no photophobia, less lachrymation than in the strumous type, and occurs most commonly in adults.

Phlyctenular conjunctivitis should be treated by the instillation of a one to two grain solution of atropia, three times daily, the strength varying

with the age of the child. The youngest can bear the one-grain solution if used with care, and the physician can always use the four-grain solution for his own convenience, without danger, if he simply lets one drop fall into the eye, and turn the head so that the tears flow away from the nasal duct. Every other day the physician should dust into the eye some *precipitated* calomel (not the ordinary drugs of the shops) with a camel's hair brush, directing the mother to use the atropine three times daily; the dilation of the pupil will show how faithfully or negligently she follows his instructions.

A capital point in these cases is this: If there be much photophobia and ciliary congestion, first use the atropine to reduce this condition somewhat before resorting to calomel; then begin with the mercurial. If, on the contrary, the *conjunctiva* be most affected, and the *cornea* but little, as evidenced by lack of ciliary engorgement and photophobia, then use the calomel freely from the first. Of course this local treatment must be supplemented by proper general measures, such as cod-liver oil, syrup of the iodide of iron, etc.

A capital lotion in mild forms of simple conjunctivitis is that of Dr. Williams, of Boston, viz: Acidi boraci, gr. v: aquæ camphoræ, ʒ j; Mix. This, with the following lotion, will relieve any mild case of conjunctivitis: ʒ. Spt. lavend. simp.; spt. vini gallici, aa ʒ ss; spt. rosemary, ʒ ij; Mix. The first lotion is to be dropped into the eye night and morning; the second is to be used as a mild evaporating application to the outside of the lids. Care should be taken to secure the simple spirits of lavender, as the aromatic spirits will not answer. In severer cases the zinc lotions can be used, two grains to the ounce of distilled water, or alum,

five grains to the ounce of water. But I much prefer, after pus begins to form, to use nitrate of silver, five grains to the ounce, brushing the lids rapidly with a camel's hair brush wet with this solution, afterwards quickly brushing away the superfluous fluid with the same brush rapidly dipped in plain water and drawn in the same way across the partially everted lids. This should be repeated every other day, or every fourth or fifth day, according to the severity or necessities of the case.

This leads me to the treatment of *gonorrhæal ophthalmia* and the *purulent ophthalmia* of infants, diseases which any one may be compelled to treat, and diseases, too, which require the utmost boldness and decision for successful management. No time can be lost. In the case of infants, see that the eye is cleansed *every hour* in bad cases with warm water and a piece of soft cloth; evert the lids by pressing up the upper with the first finger of the left hand, and depressing the lower with the second finger. Then rapidly wipe away with the moistened rag all secretion, and rapidly brush over after this cleansing a two-grain solution of nitrate of silver in the manner above stated. This is to be used in urgent cases every three hours, until the case begins to yield; in mild cases, once daily. Then the milder lotions can be used, viz: *Acidi boracici*, gr. ij-ijj to ounce of camphor-water. If this treatment be carried out faithfully and properly, no case of this kind need ever be lost.

In the gonorrhæal cases, the silver solution, five grains to the ounce, should be used *once* daily, and the eye kept the remainder of the time covered with ice-water compresses. This is imperative in these cases and must not be neglected. In both diseases the bowels should be kept freely open, and the ordinary sedatives (in case of constitutional disturbance) appropriate to the condition should be given. These are the sheet anchors, nitrate of silver and ice compresses, and I might here say of the former that the proper time to apply is always *after the discharge of pus begins, never before, in any conjunctival inflammation*. The use of more than five grains to the ounce is never required, just as powerful an impression being available with this strength as with the more concentrated solutions, the whole question hinging on the duration and thoroughness with which the agent is applied. The frequency of these applications may be regulated by the copiousness of the discharge, which always lessens under their use, and only requires subsequent applications when it begins to flow freely again. More than once in twenty-four hours is seldom ever required.

Where only one eye is affected, the sound eye should be closed with linen compresses covered with and cemented to the orbit with collodion—space being left in the outer and lower angle for ventilation.

Iritis, with excessive conjunctival injections, is

often mistaken for conjunctivitis, and the condition of the iris overlooked in the effort to subdue the conjunctival hyperæmia, until extensive adhesions form and the integrity of the eye is permanently destroyed. *Iritis must be recognized at once, and throttled in its beginning*, if we hope to stave off the inevitable adhesions and the train of evils that constantly menace the neglected organ. If the following rules be considered in all doubtful cases, mistakes of this kind are impossible. Always examine the action of the pupils. Let the patient confront a bright light, and interpose the hand between the eye and the light; if the pupil responds naturally, as compared with the other or any healthy eye, if there be no pain, no dimness of vision, no great ciliary injection, then exclude iritis. If this test proves unsatisfactory, then drop into the eye a drop or two of a four-grain solution of atropia, which will settle beyond question any further doubt. If the pupil dilate within twenty minutes and show a perfectly circular contour, then you may safely assure your patient that the iris is unaffected.

Remember, then, that the signs of iritis are four: First, discoloration of the iris, often slight at first; second, ciliary injection; third, dimness of vision and sluggish pupil; fourth, pain; all, or most of which, are absent in conjunctivitis. Another capital point is to notice the maximum of congestion; if in the fold of the conjunctiva, think of conjunctivitis: if surrounding the cornea (ciliary injection), rather look for iritis or inflammation or ulceration of the cornea or ciliary body (cyclitis)—all of which call loudly for atropia, the remedy *par excellence* for diseases in this locality. In a broad, general sense, atropine is indicated in all conditions involving congestion of the blood-vessels forming the ciliary zone, and any injection here should always suggest a thorough scrutiny of the iris and cornea.

Another safe rule in ocular therapeutics is, when a question of doubt between the use of astringents and atropine arises, to give the latter. Eliminating the rare cases where atropine causes a prolapse of the iris through a perforating ulcer of the margin of the cornea, and an occasional irritation of the conjunctiva, and, perhaps, in some cases of glaucoma, I know of no condition of the eye in which atropine can do harm, and there is certainly no other agent so universally useful.

The treatment of iritis is pre-eminently by atropia. *Secure full dilatation of the pupil at once*, if possible by instillation of the four-grain solution every few hours; once secured, maintain dilatation by the two-grain or one-grain solution used thrice daily, and supplement by hot fomentations to the closed lids, calomel purges and aconite where the fever runs high.

Before leaving this subject, I would suggest that, in all cases of sharp fever, accompanied by violent pains in the head and eyes, the iris be examined with reference to iritis, and the signs of

acute glaucoma (to be mentioned further on) be looked for.

Many cases of *inflammation of the lids* are brought about and maintained by errors of refraction, which can be readily corrected by properly fitted glasses, and physicians should be on the watch for this condition. All cases of obstinate conjunctivitis, inflammation of the lids, and even irritation and gritty sensations in the eyes, after reading especially, or at near work, should direct attention to this condition, and the patient should be sent to the oculist to have his vision tested.

The possibility of stricture in the nasal duct should always be borne in mind, and in obscure cases of excessive lachrymation and chronic inflammation of the inner angles of the conjunctiva, the finger should be pressed over the course of the lachrymal sac to ascertain the patency of this canal. If there be any obstruction, this manipulation will cause an abundant discharge of pus or tears which cannot be expressed in ordinary conditions of health.

Every practitioner should be familiar with the symptoms of *acute glaucoma*, for upon his recognition of this distinctive malady depends his ability to rescue vision from certain destruction. The text-books tell us of many cases of this affection which were allowed to run on to utter destruction of the eye, under the convenient diagnosis of bilious attacks, neuralgia of the eye, and other familiar but fatal names. As before stated, whenever called to a case of violent headache, ocular pains and fever, no harm will be done by keeping this affection in view, and a single eye saved well repays one from many interrogations, which, perhaps, are often unnecessary.

The *signs of acute glaucoma* are, first, pain, more or less violent; second, dimness of vision; third dilation of the pupil; fourth, shallowing of the anterior chamber; fifth, steamy cornea and increased hardness of the eye on palpation. This is generally accompanied by great congestion and often swelling of the lids, and often by fever and vomiting. The tension of the globe of the eye is quite characteristic, and can be readily appreciated by comparing with the fellow eye, being often of strong hardness, and forms the most constant and reliable symptom of this dangerous malady. It should always be looked for, and when accompanied by the foregoing symptoms, is conclusive. The patient should at once be treated freely with purges, leeches to the temples; and if the surgeon declines to risk iridectomy, which should be done preferably in all cases, let him instill at once a four-grain solution of eserine into the eye, to be repeated according to the degree of pain and tension; then cover the eye with hot compresses, and secure the aid of some surgeon who can perform the operation of iridectomy or sclerotomy—operations which, under such circumstances, might be undertaken by any one possessing steadiness of hand. The details of the operation can be found in any work on ophthalmic surgery.

Instead of using the iridectomy knife, Van Graefe's cataract knife may be used for the corneal incision, which should be smaller and a little posterior to the ordinary incision, for cataract. The iris should be removed to the full extent of the incision, if possible, for upon this greatly depends the completeness and benefit of the operation.

Chronic glaucoma is often confounded with senile cataract on account of the greenish pupillary reflex. Make it a rule to examine the *tension* in all cases of doubt, and get the history of the case. There is nearly always a history of pain in glaucoma, none in cataract, and there is also more or less conjunctival hyperæmia in the former; none in the latter. When, therefore, you have increase of tension with impaired vision and pain in the eye, the probabilities are strongly for glaucoma. These cases should be sent to the oculist, and where this is not practicable, eserine should be tried, a few drops into the eye several times daily (two grains to ounce of water).

I next desire to call attention to the very important subject of *impaction of foreign bodies*, one upon which every physician should be thoroughly informed, inasmuch as they are constantly called upon to treat these cases, and upon their skill often depends the results to the vision and usefulness of the organ. Foreign bodies imbedded in the cornea are best removed by the spud; and time will be saved to the inexperienced operator if he will use the speculum and fixation forceps in firmly adherent particles, thereby giving him complete control over the movements of the eye. Children should be chloroformed, and in some instances sensitive females may also require anaesthesia. When the body is firmly imbedded, it may become necessary to dig it out with a sharp instrument, but this should be generally avoided. When the body penetrates the cornea and reaches partly into the anterior chamber, more care must be taken, and often two needles required—one penetrating the cornea and steadying or pressing the particle outwards; the second employed in digging around and loosening the body from without. Bodies lodging in the anterior chamber must be removed at once by an incision into the cornea, and a removal, if necessary, of a part of the iris; where this body prolapses into the wound or when it receives the fragment into its tissue, this must be done at once, or the eye will be surely destroyed by iritis, cyclitis, or, perhaps inflammation of the entire organ; when the body lodges in the bloodless, nerveless tissue of the lens, no immediate operation is necessary, and palliative measures should be instituted. Instances are on record of foreign substances remaining in this locality for long periods, without inducing greater damage than that of opacity in the neighborhood of the body. This tolerance cannot be said of any other portion of the eye, however, and whenever the particle lodges elsewhere it must be either removed or the eye will perish. Especially is this true of the vitreous body. Whenever the intrud-

ing substance is within reach, attempts may be made to extract with delicate forceps, or with Gruening's magnet; but failing in this the eye should be removed at once as a prophylactic measure against sympathetic ophthalmia, of which we will now make a brief survey.

Dr. Carter says, in treating any case of injury to the eyeball, the first question to be asked one's self is: Does this menace the other eye with *sympathetic ophthalmia*? It must be remembered that a serious injury can never leave more than imperfect vision, and that sympathetic ophthalmia, although it can be prevented by enucleation, can seldom, if ever, be cured. When, therefore, there is any serious risk of its occurrence it is improper to seek to save the damaged eye at the probable cost of the loss of the sound one; and the patient should be told from the first that his only safety is in an enucleation. But as sympathetic irritation nearly always precedes actual inflammation an intelligent patient living within reach may be left to watch the course of events, after having been informed of the symptoms which usher in this affection, and instructed to report to the surgeon at once upon the slightest symptom of irritation, such as gritty sensations, weary or strained feeling, impairment of accommodation, etc. Again, wherever enucleation is unavoidable, then let it be done at once before inflammation sets in in the injured eye. Such conditions are, rupture of the eye-ball and disorganization of its contents, puncture by coarse instruments, lacerated wounds of the ciliary region, foreign bodies in the eye.

Concerning sympathetic ophthalmia, by far the most important measures refer to prevention. Once instituted, little can be done to check its course. Therefore it becomes the surgeon's duty to advise enucleation in all eyes which are at once useless and liable to light up these destructive inflammations, such as all eyes blind from diseases of the anterior segment of the globe, especially if tender in the ciliary region. Nettleship says, "that any lost eye in which there are signs of past iritis, especially if blind, should be removed. When an eye presents symptoms demanding enucleation ordinarily, yet possesses some degree of sight, much judgment is required in pronouncing its fate. Perhaps, in these cases, if the ciliary tenderness be not too great, it is best to wait for signs of sympathetic irritation in the fellow-eye—always keeping the eye under close surveillance, and, if possible, the patient in a darkened room. All such eyes should be closely watched, and when the peculiar ciliary sensitiveness, produced by pressure over the ciliary region through the closed lid (the patient being directed to look down), is quite marked, causing the patient to start suddenly on the slightest touch, then it is unsafe to defer the operation any longer. This symptom, then, must be constantly looked for, and, when found, immediately attended to. The risk of the delay outweighs any usefulness that the eye may possess.

The operation of enucleation is not difficult, and can and should be performed by any physician who values the happiness of a fellow-being. The details of the operation can be found in any book on ophthalmology. The importance of this subject cannot be over-estimated, and any physician should feel his attainments incomplete unless he feel competent to decide upon and act in emergencies such as I have described. If this paper attract a more thorough attention to these subjects, if it in any measure instruct, or if it supply a want within the scope of general medical literature, then its object will be attained and the writer content.—*Virginia Medical Monthly*.

TREATMENT OF POST-PARTUM HEMORRHAGE.

By J. J. LAMADRID, M.D.

The management of post-partum hemorrhage is preventive and curative. The preventive measures are, to a certain extent, hygienic. Thus, if the woman is plethoric, and has bled profusely at former labors, mild saline cathartics and diuretics are indicated; at the same time she must be kept upon a low diet for some time previous to confinement. On the other hand if she is anæmic, some of the preparations of iron in combination with one of the bitter tonics, or mineral acids, must be administered. Also stimulants, plenty of good nourishing food and moderate out-door exercise, if the weather is pleasant. Prof. Penrose recommends that when the labor proves tedious it is to be hastened by the judicious use of the forceps. If it is too rapid the endeavor is made to render it slower by anæsthetics, etc.

It has been my rule in all cases to make firm, steady, gentle pressure externally over the fundus-uteri immediately after the birth of the child. Generally the placenta is soon expelled, the womb readily contracts, and hemorrhage is thus prevented. If there is a tendency to undue relaxation of that organ after it once has contracted, the pressure with the hand is kept up without interruption and until there is no fear that the hemorrhage will recur. At the same time I have been accustomed, in all labors, to administer from half to a teaspoonful of Squibb's fluid extract of ergot as soon as the child is born, and another dose following the expulsion of the placenta, to stimulate tonic uterine contractions, and thus lessen the chances of coagula being retained in utero, and the possibility of any after hemorrhage. If the woman is subject to flooding, the ergot should be given just before the child is born, when the presentation is far advanced or pressing against the perineum. Ergot being occasionally uncertain in its action and requiring at least twenty minutes before it will act, in urgent cases I have used it hypodermically with speedier and more gratifying results. When the above means have not proved effective.

the introduction into the uterine cavity of pieces of ice, together with the use of iced cloths, or lumps of ice applied externally upon the lower part of the abdomen, have been the means of arresting the flooding at once. If it still persists firm pressure is then made with one hand over the fundus and with the other removed from the vagina and uterus all clots found there collected or retained. At the same time, another piece of ice about the size of a small egg may be carried up and left in the uterine cavity. On two occasions, when ice could not be obtained, common vinegar was used with most decided effect—it checked the hemorrhage immediately. This is applied, as recommended by Prof. Penrose, with a piece of rag dipped into a cup of vinegar, and then carried up into the uterus and squeezed; or a lemon will answer the same purpose. This is pared first, gashed in numerous places, and thus passed up into the womb and squeezed.

Recently I had occasion to try the hot-water injections recommended by Dr. A. H. Smith, of Philadelphia, by means of which a very profuse flooding was stopped effectually, after other means had failed. In this case it was noticed that the womb had a tendency to contract and relax as soon as manual pressure was removed from the fundus.

My experience with this agent in the above case was equally gratifying. It is recommended to use the water at a temperature at from 105° to 120° F., and the amount of injection continued until the return steam is clear. Before introducing the vagina nozzle, however, care must be taken to force the air out of the syringe thoroughly before it is used. The metallic tube is passed to the fundus-uteri, the fundus being grasped during the introduction of the tube. The continuance and frequency of the repetition of the injection must depend on the promptness and permanence of the uterine contraction.

A word or two as regards concealed hemorrhage. In these cases, as we all know, the blood which escapes from the patulous orifices of the vessels on the inner surface of the uterus becomes coagulated at the ostinæ, which it plugs up, the hemorrhage thus prevented from escaping externally goes on, and the tonic uterine contractions being absent, it distends the womb, and the quantity thus abstracted from the system becomes so great that the patient may die at once, or fall into a state of syncope, from which she can be revived only by the most prompt measures. There are always urgent and desperate cases over which one must act once by selecting those means which are nearest and ready at hand. Thus the right hand is promptly and resolutely carried up into the vagina, through the internal os up into the uterus to break up the coagulum found there formed and retained, letting the fragments pass by the palm of the hand and detaining this within the uterus until it is expelled by the uterine contractions which in the meantime may further be encouraged by the use of iced-cloths applications upon the abdomen, and by

firm pressure made over the fundus, in fact by all possible means known to incite the tonic contractions of the uterus, and thus cause it to close up the open venous orifices. In these cases ergot administered hypodermically acts quicker and more satisfactorily. As regards the use of stimulants and opium, these are generally employed with decided advantage but when, or the proper time to give them, one must be governed by the condition of the patient.

It is hardly necessary to allude to the position the woman should be placed in, since we all know how important this is in the treatment of this form of hemorrhage.

I will now pass on to the consideration of the other means which have been recommended or suggested instead, or as being more effectual when others have failed. Thus all stringent preparations have been used with more or less success. The tincture of capsicum in 3i. doses, it is said, will prove the best of stimulants in atony. Ergot has already been alluded to, but Dr. Harrison, of New York, and others, have recommended its use in the form of intra-uterine injections in the following manner: Remove coagula first, then with a Davidson syringe, wash out all blood with cold water, and quickly inject into the uterine cavity $f. \frac{3}{4}$ ss. Squibb's fluid extract of ergot with water $\frac{3}{4}$ iv. Spirits of turpentine in tablespoonful doses has been recommended by Dr. J. G. Swaine, of London and used with decided benefit. Dr. Wm. Donovan, of Edinburgh, and others, speaks highly of tincture cannabis Indica in doses of gttss. xx p. r. n., and says he never knew it to fail. Tincture of iodine is also highly extolled by Dr. Trask and others; applied or used as an injection, he claims it is by far the safest and most efficient remedy.

Ipecacuanha given in large doses is known, by producing rapid emesis, to cause strong contractions in uterine inertia and thus to promptly check the hemorrhage. Professor Fordyce Barker recommends the tincture nux vomica in large doses (gtts. xx), together with fluid extract of ergot (gtts. xxx) every half hour, until assured that the uterus is well contracted. But, as Professor Bartholow properly remarks in his *Materia Medica*, "It is obvious that no more than two or three doses of (nux vomica) such strength will be safe."

Injections of iced water into the rectum, or into the uterus itself, are means which have frequently succeeded in arresting uterine hemorrhage. The application of the child to the breast has been strongly recommended by Dr. Rigby. Others have reported interesting cases in which all means had failed to contract the uterus in primiparous cases until the child was applied to the breast.

Dr. Keer has reported a case of severe post-partum hemorrhage in the *British Medical Journal*, November 1, 1869, in which the patient was restored from a state of collapse by the

inhalation of five minims of nitrate of amyl, whilst he flow was immediately arrested.

Dr. Wilson, of Baltimore, urges the introduction of the hand within the uterus, and raking the surface which has been occupied by the placenta with the finger nails.

Injections of a powerful styptic, such as the tincture ferri chloride, or what is better, the liquor ferri persulphate, is another agent highly spoken of by many continental authorities, but is little thought of or practiced in this country for reasons well known to us all.

Professor Von Hecker, of Munich, and Thompson, of New York, claim to have obtained excellent results from the application of ether spray over the hypogastrium.

Electricity and galvanism have been found of decided advantage, and on many occasions succeeded when every other means had failed. This has, at the last moment, when the woman was sinking, brought on uterine contractions, stopped the flooding and saved her life. One of the poles is placed over the fundus, and the other over the lumbar region or on the perineum, or, what has been found more efficient, one of the poles is introduced into the vagina and applied to the os-uteri, and the other is placed over the fundus, or on the back. The power should be sufficiently strong to produce contraction, and the application must be continued till the contraction remains after the pole is withdrawn.

Dr. Hamilton, of Falkirk, has advocated another method of applying pressure over the womb, viz: "It consists in passing the fingers of the right hand up in the posterior cul-de-sac of the vagina, so as to reach the posterior surface of the uterus, while counter pressure is exercised by the left hand through the abdomen. The anterior and posterior walls of the uterus are thus closely pressed together."

When every other means have failed, pressure on the abdominal aorta with the fingers or with an aortic tourniquet has been recommended and used with good success in very serious cases.

Professor Guillon de Coze has suggested a method which can be employed when the usual plan has failed, or when the aorta cannot be compressed directly, or where the entire uterus cannot be made the direct medium of compression.

To this method, as far as I can learn, no reference has been made in any of the English text-books and journals at my disposal. It consists in introducing the right hand into the uterus, through which a more immediate and effective pressure is made upon the aorta, by depressing this between the posterior wall of the womb and the lumbar vertebræ. As yet I have had no occasion for trying this procedure. I am inclined, however, to think well of it, as there is no doubt of its being practicable and advantageous, from the fact that two important indications can be accomplished at once, viz: it intercepts the flow of blood through the most direct pressure that can

be made upon the aorta, with only the intervention of the posterior uterine wall, while the hand thus introduced within the uterus excites that organ to contraction, or acts as a uterine irritator.

Finally, the transfusion of blood or the intravenous injection of milk in place of blood, as recommended by Dr. T. G. Thomas, has been the means of saving the lives of many desperate cases, after every other means had failed, or in cases in which the loss of blood had been excessive, and with very little hope for saving them.

In conclusion, I wish to call attention to the fact that too much reliance should not be placed on the value of compression, as this is nothing but a mechanical means which is employed; very proper, no doubt, for interrupting rapidly the flowing, but evidently without any action upon the contraction of the uterus. It is a powerful means against this form of hemorrhage, but useless against uterine inertia, which, as we all know, is the chief cause of this accident. Its utility, however, cannot be denied, as by means of it a temporary dike, as it were, is thus formed, which opposes the destructive current, and thus as supplementing, rather than curative, and without superseding other and more radical plans of treatment, it should be employed when necessary. In the meantime the administration of ergot, either hypodermically or otherwise, must not be forgotten while other methods are being adopted, as by it the uterine fibres are awakened to contraction, and consequently closure of the sinuses is thus insured. Sometimes electricity, the hypogastric pressure or friction, and the introduction of the hand within the uterus are sufficient to rouse the uterine inertia; these, however, without the aid of ergot, are almost worth nothing; therefore to incite and to keep up uterine contraction, this powerful agent first of all, together with pressure over the fundus, must be employed in the treatment of post-partum hemorrhage.—*Proceedings Medical Society, County of Kings.*

THE EFFECTS OF SOME DRUGS IN LACTATION ON NURSE OR NURSING.

[By THOS. M. DOLAN, F.R.C.S. Ed., in *Lond. Practitioner*.]

CHLORAL, HYDRATE OF.—Chloral is now so frequently used in connection with parturition, and is such a well-known remedy for puerperal convulsions, that it is a most important medicine in connection with my subject. Dr. Fothergill has pointed out the effects of chloral on the general vascular system, and its calming influence on the arterioles of the skin. We know that it is cumulative, and hence some of the sudden deaths from its use. So that if it be given as recommended by some accoucheurs it may affect the lacteal secretion.

Ringer tells us E. Lambert recommends chloral in parturition in fifteen-grain doses every quarter of an hour till the patient falls asleep; and he

states that this treatment does not weaken the uterine contractions, while the patient is prevented from suffering pain, and is insured calm repose after delivery.

Dr. Playfair thinks that chloral acts far better than chloroform inhalation, as chloral does not lessen the contraction, while it greatly lessens the pain. Moreover, it is chiefly applicable at a period when chloroform cannot be used; that is, toward the termination of the first stage before the complete dilatation of the os. The patient falls into a drowsy state, a sort of semi-sleep. Dr. Playfair gives fifteen grains, and repeats the dose in about twenty minutes, leaving its subsequent administration to circumstances.

Obs. 1. Fifteen grains of chloral given to a patient every four hours before confinement until seventy-five grains had been taken. Labor slow, tedious, terminated naturally. No trace on third day in milk. I believe that chloral does have an effect upon milk, though when given before labor it is eliminated before the third day.

CASTOR OIL.—The effects of castor oil in the nursing state are well known. In plethora when the secretion is deficient it is most useful; and the leaves of the plant will be found of great benefit applied as a cataplasm. I have repeatedly given castor oil to mothers, and have invariably found that it exercised a purgative action on the child; the mother's milk possessing the taste and flavor of castor oil.

CONIUM, HEMLOCK—Most of the umbelliferæ are readily absorbed by the lacteal vessels, and may be easily found in the milk. Conium, from its sedative action and its influence on the nerves of motion, could not be expected to increase the milk supply. There are reasons, however, for its administration to mothers who are nursing, so that it is important to note how soon, if at all, it appears in the milk, and what dose produces an effect. Conium, praised by Storck for the cure of uterine scirrhus, and by Dr. Tunstall for chronic inflammation of the womb, is an excellent sedative for backache and for the sexual organs. It must be given until its physiological effects are produced, and this means a dose of the succus conii (B.P.) of two or three drams.

I administered two-dram doses of the succus conii every three hours to Helen W. until she had taken twelve drams.

DIGITALIS PURPUREA, PURPLE FOXGLOVE.—As a rule digitalis lowers vascular activity and blood-pressure, although there are occasions when it has an opposite effect. It is well called a cardiac tonic, as it regulates the heart beats, producing rhythmic contractions in place of disordered and irregular action. As the latter state may exist during lactation, its administration may sometimes be deemed advisable. In three cases I administered infusion of digitalis in half ounce doses every six hours, but could not detect any evidence of it in the milk. This is doubtless owing to its being so speedily eliminated by the kidneys.

ERGOTIN.—The effect of ergotin on foetal life is well known. Its influence on the milk has not been noted. I gave twelve grains to a private patient one month after confinement, owing to a slight attack of hemorrhage, in doses of two grains every three hours; the effect was satisfactory. The mother told me that she believed the pills, though small, had affected her milk, as her child was cross and seemed to suffer from pain, and would not take the breast. She said she would not take any more medicine. She allowed me to draw off some of her milk, which was submitted to the test but none was found.

IODIDE OF POTASSIUM.—Simon states that he could not detect this in milk, and Meymott Tidy (London Hospital Reports, 1867) admits a similar failure; Herberger found it. My own observations accord with those of the latter, and I employed it for two reasons: First, to see whether it did enter into the milk, and, secondly, to observe its action as an anti-lactescent, for which purpose Dr. F. H. Morris, Cheltenham, recommends it. He says (*Lancet*, vol. ii, 1874), "that in three-grain doses every three hours it is better than belladonna."

Emma Cooper. History given in previous section. I gave her fifteen grains of iodide of potassium every three hours. After she had taken sixty grains I drew off six centimeters of milk, and tested it. No alteration as regards quantity of secretion. I continued the iodide for some days in smaller doses (five grains), but still there was no decrease in quantity of secretion. So that my observations do not confirm those of Dr. F. H. Morris, but I believe its prolonged use deteriorates the milk by impoverishing the blood.

I drew off twenty centimeters of this woman's milk on the third day of her taking the iodide, and gave it to a child aged eighteen months. The child's urine was collected and examined: slight traces of the drug found.

MERCURY.—An Irish student was once asked how he would salivate a child three months old, and he replied that he would give mercury to a she-goat and allow the child to drink the milk.

Mercury undoubtedly finds its way into the blood, and, as Headland says (Actions of Medicine), by some inscrutable chemical power, of whose nature we know nothing, it is able to decompose the blood; by some destructive agency it deprives it of one-third of its fibrin, one-seventh of its albumen, one-sixth or more of its globules, and at the same time loads it with fetid matter, the product of decomposition. Mercury has been found in milk. (Gallier, *Toxicologie Générale*, 1855.)

Obs. 1.—Mary W., private patient, aged twenty-five, gave five grains of blue pill at bedtime, followed by a purgative draught in the morning. Aperient action produced. No effect on milk. No trace of drug could be found in it.

Obs. 2.—Rebecca G., syphilitic private patient, gave gray powder in doses of one grain every six hours for three days; slight purgative effect pro-

duced, with marked fetor of the breath, without sponginess of the gums. Presuming that the mercury had evidently entered the circulation, I drew off twelve centimeters of milk. Mercury could not be detected. This investigation is incomplete.

OPIUM.—I have had several opportunities of noticing the effects of laudanum on mother and child. When the dose is large the narcotic principle can be detected in milk, but in small doses no trace can be found.

I had a patient, Mrs. H., a lady in good position, who was in the habit of taking the tincture for sleeplessness, her usual dose being twenty to thirty minims. As she was suckling, I asked her whether she had noticed any effect on the child; she answered, yes. When the child was fed it slept the whole night without disturbing her. Her infant was pallid and listless. She sent me some of her milk after taking her usual quantity of the tincture. Odor slightly altered. Responded to test for morphia.

QUININE.—Quinine readily passes into the blood, and probably very little is decomposed in the body, as it can be detected in the urine and sweat of healthy and fever patients. It is almost exclusively eliminated by the urine, most of it being secreted in six hours. It has been found in the blood.

As quinine is one of the best tonics we possess it is given therefore in all states of the system where debility is present; so is much used when mothers are nursing, and it becomes important to note its effect on mother and child.

Obs. 1.—Small doses, three grains every hour, were given to Alice W. After twelve grains had been taken eight centimeters of milk were drawn off, but no trace could be found; though it was found in the urine. The child did not object to take the breast. No doubt only a small quantity was taken up by the blood, as the dose was small; the largest quantity being eliminated by the kidneys.

RHUBARB (RHEUM PALMATUM).—All the polygonaceæ are not so readily absorbed as this drug. It is almost exceptional as regards the ease with which it can be found in the urine, sweat, in the serum of the blood, and in the milk. It colors the secretions, owing to the presence in it of chrysophanic acid. As a purgative for women and children it is well known. It acts physiologically upon the infant through the agency of the mother's milk, which it renders slightly bitter and at the same time purgative.

SENN.—Neligan tells us that the cathartic principle of senna is absorbed before its operation is produced, as is proved by the action on the intestines, when an infusion is injected into the veins, and also by its imparting a purgative property to the milk of nurses.

I have frequently employed it as a purgative for nursing mothers, and have invariably found that the milk affected the infant—in many cases

producing colic. The peculiar flavor of the senna and the odor were distinctly perceptible, though it does not lessen or increase the secretion of milk.

RESTORING THE HEART'S ACTION WHEN IT HAS CEASED TO BEAT.

I do not remember what induced me to kill a mouse by a blow upon the head, and rip it open to see the heart beat. It did not. I pricked it with a needle and set it a-going. It stopped after a time. Then I gave it a second prick, and a few pulsations were distinctly seen. When I was in petticoats my father was sent for to see a girl in a fit. He was out, and when he came home he was informed of the fact. "How long ago, and any second message?" Being told, he thought he need not go. My mother suggested he "ought to go," which he did. He found the girl dressed in her grave-clothes and "laid out" upon a linen-covered table. He examined her and found some warmth over the heart. He ordered hot water to be brought (not scalding hot), and poured it into a jug; tore her shroud open, stood on a chair and poured a continuous stream of hot water, until the throbbings of the heart were distinctly seen. That girl was the mother of several children before I left Scotland, in 1848. My mother used to laugh, and take her share of the credit of her restoration to life.

An old man here, Robert Robinson, several years before his death, took a fit, and apparently expired upon the floor, where he was lying, pulseless and breathless. The heart had ceased to beat, and I was told that "he was beyond any doctor's power now." I felt some warmth over the heart, and tried my father's remedy; and to the wonder of spectators, the septuagenarian revived and lived several years afterward. Hot water can easily be obtained, and no one can object to such an experiment.—*J. C. Reid, M.D., British Med. Journal.*

TEST FOR SUGAR IN THE URINE.

Dr. L. S. Oppenheimer gives the following:

℞ Cupr. Sulph., cryst.....1 grain.

Glycerine, purif.....1 ounce. M.

One drachm of this mixture will reduce one grain of grape-sugar in a caustic alkali. Two or three drops of the mixture are put in a test-tube, and one half ounce liq. potass. added; the whole is then boiled, a few drops of urine added, and the whole boiled again. If sugar is present it will be thrown down as the brownish-yellow cuprous oxide. The test is surer than Trommer's; it can be used to determine the quantity of sugar; albumen does not interfere with the reaction, and the mixture will keep indefinitely.—*Med. Brief.*

TREATMENT OF HEMORRHOIDS.

By S. S. TODD, M.D., Professor of Obstetrics and Diseases of Women, Kansas City Medical College.

Constipation of the bowels is the almost constant predisposing, as the use of drastic cathartics is commonly the exciting cause of hemorrhoids, and no treatment can be successful that does not embrace within its scope an assurance of one daily easy evacuation of the *lower bowel*.

The first step in the treatment of *recent* cases should be the administration of a saline cathartic, and the best is sulphate of magnesia. After this, the following pill may be used: Compound extract colocynth, grs. xxx; extract nux vomica, grs. xx; extract belladonna, grs. x. Divide into forty pills. One to be taken every evening on going to bed. The effect is a moistening of the mucous surface of the intestinal canal and increased peristaltic action. In this way we may solicit *one consistent and normal evacuation of the bowels every day at the same hour and one only*. To insure this, the patient should have a fixed hour at which to go to stool, and steadfastly restrain any desire for this at all other times. The habit of having one daily evacuation is in this way quickly established, and the sluggish condition of the bowels cured, if the means are not too early abandoned. Three or four months are sometimes required in which to break up the faulty habit, and prevent return.

Should the pill above mentioned cause a liquid stool, or should it cause more than one stool, your object will be defeated if you persist, and the quantity of compound extract of colocynth must be diminished. On the other hand, should it fail to secure one soft and consistent motion daily, the quantity of colocynth must be cautiously increased.

In addition to the above, the following will be found to give instant relief from pain, and accelerate the cure: Iodoform, 3i; balsam peru, 3ii; cocoa butter and white wax, of each, 3iss; calcined magnesia, 3i. Incorporate the mass *thoroughly* and divide into twelve suppositories. Insert one after each evacuation of the bowels, and oftener, if needed. The iodoform is a local anaesthetic of great value, and does not constipate. The balsam serves the double purpose of soothing the irritable bowels, and masking in a great measure the disagreeable odor of the iodoform. The magnesia is added to give solidity to the mass and preserve the form of the suppository.

Hemorrhoids of *long standing*, though benefited by the foregoing treatment, will rarely be cured.

Most persons are familiar, doubtless, with the methods of treating this class of cases, by the use of the hypodermic syringe and carbolic acid. As shown by Dr. Andrews, however, this practice is not without its risks. I have never tried it, but acting on the hints afforded in this way, I began injecting a strong solution of *nitrate of silver* in the same manner about two years ago, and the results thus far in eight or ten cases, nearly all of

them females, have been all that could have been desired. In not one of these cases, so far as I know, has there been failure to effect a cure. In one only, that of a very impressible lady, was confinement to bed made necessary. In this case some tumefaction following, she was kept in bed for two or three days, opiates being given to procure rest.

Since the time mentioned I have not used a ligature or écraseur in a single case, my plan of treatment in confirmed hemorrhoids being very simple, and as follows: All tumors found at the verge of the anus, and covered in part or wholly with integument, are clipped off with the scissors. If situated within the external sphincter, the bowels having been moved with a dose of sulphate of magnesia given a few hours before, the patient is placed over a vessel, and directed to strain (a vessel filled with hot water is best). If the tumors do not come within reach in this way, the finger should be thrust into the bowel, provoking tenesmus, and the patient again be instructed to force the piles down. When within reach, the nates being separated by an assistant, the tumors are seized, one by one, with a forceps, and held while with the hypodermic syringe, from five to ten minims of a solution of nitrate of silver, one drachm to the ounce of distilled water, are injected into each, not stopping till all have been thus injected. No pain is felt except what is caused by handling parts rendered hyper-sensitive by protracted irritation.

One of the suppositories before mentioned may now be passed into the bowel, and thenceforth, if the treatment already given for removal of constipation be followed up assiduously and patiently, little further inconvenience will be felt and no further treatment required. Even though the suppository be omitted, little pain is felt, and the patient goes at once about his business. The tumors immediately become hard, atrophy, and in about ten days have wholly disappeared. They can only recur from the cause which first produced them. I have not had occasion to repeat this little operation in the same individual but once, which was in the case of an old gentleman, in whom tumors located higher in the bowel, subsequently came down, and were cured by the same means.

The advantages of this mode of treatment over the use of the ligature and écraseur, are its apparently greater success, and greater freedom from risk, so far as theory, and a few cases only may have weight, its feasibility on the part of the operator, and its readier acceptance on the part of the patient.

But it may be asked in what respect the nitrate of silver is preferable to carbolic acid. I do not know that it is to be preferred to that agent, but theoretically, at least, it is safer and more effectual. Its power to coagulate albumen is far greater, and in this fact will probably be found its greater efficacy and greater safety. I believe it will prove

to be absolutely harmless, locally and generally, under all circumstances, and while it cannot take the place of the knife or scissors in every case, it must have a wide range of usefulness if further trial shall confirm my limited experience in its use.

As females from their habits of living are oftener subjects of constipation than males, so it is among them that hemorrhoids find the larger share of victims. When hemorrhoids are concurrent with uterine disease, with resulting pelvic congestion, and particularly when the uterus is much increased in volume, no treatment can be permanently successful that does not address itself also to the removal of such accessory condition.—*St. Louis Courier of Medicine.*

TREATMENT OF CHRONIC PROSTATIC ENLARGEMENT.

Mr. Thos. Smith, Surgeon to St. Bartholomew's Hospital, in a recent lecture published in the *London Medical Times and Gazette*, gives the following advice on the above subject:

Your assistance will rarely be sought in the early stages of this disease; but should you be consulted by an elderly patient suffering from undue frequency or difficulty in micturition, it will always be prudent to make a digital examination through the rectum, to ascertain the condition of the prostate. The examination is best made with the patient lying down on his back. Your finger-nail being filled with soap and the finger well oiled or greased, it should be introduced very slowly, so as not to excite spasm of the sphincter.

Should you judge that the urinary difficulty is caused by prostatic enlargement, the occasional passage of a full-sized instrument will often relieve the inconvenience, and, if steadily persevered in at regular intervals, will generally secure the patient against all the more serious consequences of the disease.

In cases where the difficulty in micturition has gone on to produce an inability to empty the bladder completely, it is of primary importance that at least once in twenty-four hours the urine should be all drawn off; but in carrying out this plan it is necessary to exercise caution, lest by suddenly emptying a greatly distended bladder you should produce a complete paralysis of the organ, with a loss of the power of voluntary micturition and cystitis.

As a general rule, if there be not more than one pint of retained urine in the bladder—that is urine the patient is unable to pass for himself, it may be safely drawn off at once. But if there be more than this of residual urine (and there may be several pints), you should draw it off by installments, taking away a little more each day, until the bladder is completely emptied.

This complete evacuation of the bladder, when once accomplished, should be repeated each

day, by means of an instrument, and for the purpose an india-rubber catheter, bulbous-ended or a Coude catheter, should, if possible, be used.

By these means, in early stages of the disease, the patient will generally regain the power of normal micturition, or, at all events, if this result be not attained, he will be secure from the worst consequences of the disease.

The treatment may be carried on by the patient himself if you will be at the pains to teach him how to pass an instrument—nowadays a comparatively simple process, owing to the great improvement in catheters; for you should know that since the introduction of the various forms of soft catheters now in use, the instrumental treatment of prostatic enlargement has lost more than half its terrors and much of its danger.

The large silver prostatic catheter—at one time almost the only instrument used in these cases—is truly a formidable weapon with its long shaft and wide-sweeping curve. It was constructed to ride over the prostate, but in the hands even of experienced surgeons it frequently failed in the performance of its normal functions and rode under the gland, or through its substance. Used with a strong and steady hand it rarely failed to draw off water. As an instance of its power in this respect, I may mention a case within my knowledge where a prostatic catheter in the hands of an energetic surgeon drew off some gallons of water, which, however, a post mortem examination disclosed to have come from the peritoneal cavity.

I will suppose now that you are called upon to treat a patient with retention of urine dependent upon enlarged prostate. The difficulty will usually have come on at night time; the patient will, as a rule, be advanced in years; and the prostate can be felt in the rectum unduly prominent. In such a case let me advise you first to try a flexible red rubber catheter, of full size; it will often find its way round a corner and through a urethra which would be impervious to a more rigid instrument. This failing, you should try to pass the same catheter with a stout wire stylet reaching two-thirds of the way down the instrument; this gives you more power to push the catheter onwards, and leaves the end flexible, to accommodate itself to the distorted urethra.

Next in order you may try the Coude catheter; then, if necessary, the bulbous French instrument, a gum elastic, without and with the stylet; and lastly, others failing, a silver instrument.

Whatever instrument you may use, let it be full size; it will go in as easily as a smaller one, and is less likely to damage your patient. Keep the point of the instrument on the upper wall of the urethra; and, above all things, use no force.

After drawing off the water in a case of retention, the patient will, for a time at least, require the regular use of the catheter until he recovers his power of voluntary micturition; and should there have been great difficulty in introducing the catheter,

ter, I should advise you to tie it in for the first twenty-four hours.

In the subsequent treatment of these cases of prostatic retention, in addition to other troubles, you will often have to contend against an increasing frequency in micturition. The frequent desire to pass water must be resisted as much as possible by the patient, or it will grow upon him. The bladder must be completely emptied, and, if need be, washed out, at regular intervals, and the patient exhorted not only to resist by a strong effort of the will the solicitations of his bladder, but to avoid all sights and association that are likely to suggest to him the necessity of micturition. With this object in view, you should counsel your patient to keep his catheter and chamber-utensil out of sight; as soon as possible to leave his bedroom during the day; and to occupy his mind by any pursuit which may draw his thoughts away from his urinary necessities.—*Ohio Medical Journal*.

AIDS TO DISEASES OF CHILDREN.

By EDWARD POTTS, M.R.C.S.E.

Late Physicians' Assistant, Hospital for Sick Children,
Newcastle-on-Tyne.

RHEUMATISM.—Infants are scarcely ever the subjects of rheumatism. Children at eight years old very frequently suffer from it, and always from the acute variety. There is very little doubt that children of rheumatic parents are strongly predisposed to it. It needs only a passing reference here, as it does not differ in the slightest degree clinically from that of adult life—and the same treatment is applicable to both.

DISEASES OF THE NERVOUS SYSTEM.

CONVULSIONS.—Have been divided into three classes—viz., 1. Primary or essential convulsions dependent on various exciting causes, such as mental emotions; 2. Sympathetic convulsions dependent on nerve irritation, such as teething, disordered digestion, and organic diseases excepting those of nerve centres; 3. Symptomatic convulsions dependent on diseases of brain or cord.

Causes.—Children born of epileptic parents or of those married young are strongly predisposed to convulsions.

The exciting causes are numerous, such as fright, strong mental emotions from whatever cause. Dentition due to reflex irritation of 5th pair of nerves. Disordered stomach or bowels from administration of improper or too large a quantity of food, similarly they may follow an attack of diarrhoea. An attack of convulsions may usher in one of the eruptive fevers. Pneumonia may be preceded by them. They may arise from uræmia, or during an attack of whooping cough; lastly, they are generally symptomatic of brain or spinal diseases such as inflammation of meninges, tumours, &c., &c.

Symptoms.—The symptoms differ greatly in individual cases; generally the child has been dull and heavy for a day or two previously; there has been more or less feverishness, and, if the result of teething, the gums have been hot, swollen, and tender. If from dyspepsia there have been evidences of disordered digestion, such as constipation, diarrhoea, vomiting, or loss of appetite. The child grinds its teeth, twitches and jerks its limbs during sleep, or wakes up with cries of fright; the thumbs are generally turned inwards, and the eyes roll about uncertainly, and the respirations are irregular.

In a great number of cases, however, there are no premonitory symptoms; the child, otherwise in perfect health, is seized suddenly with a convulsion.

The appearance of the patient is as follows:—The eyes are turned upwards generally, but sometimes downwards, and roll about with a jerky movement, the pupil is sometimes contracted, sometimes dilated, the muscles of the face and neck are distorted and are thrown into irregular and violent action. The child froths at the mouth, teeth usually tightly clenched, respiration short. In the severer forms of convulsions, the muscles of the limbs are affected in addition to those of face, the head being thrown backwards or oscillating from side to side. The face assumes a purple hue, the head is very hot—the child is of course insensible. There frequently is involuntary defæcation and urination. A fit may last from a few seconds to ten or twelve hours. When it comes to an end the muscular movements cease, and the child generally falls into a sleep, from which it awakes always feeble and exhausted. Very often there is but a brief respite, and the first fit is succeeded by another and another, until a fatal termination takes place, and the little sufferer dies from asphyxia, the irregular and violent contractions into which the respiratory muscles have been thrown being the cause of this untoward event.

A convulsive attack is frequently difficult to distinguish from epilepsy, but the progress of the case, and especially if it happens to be under observation for any length of time, will clear up all doubts. Chorea is easily distinguished from infantile convulsions, as in the former condition the movements are not altogether involuntary, and are not accompanied by insensibility.

Treatment.—The first indication is to remove all exciting causes; if the gums are tender or swollen they should be freely incised. Want of cleanliness in dressing the navel-string in very young infants is occasionally the cause of convulsions. If the stomach is overloaded with indigestible food an emetic should be administered. During the seizure a hot bath, with cold to the head, either in the shape of evaporating lotions, or better still, ice, is indicated. Care should be taken to loosen all articles of clothing. The administration of Hydrarg. c. Cret., with Pulv. Rhei as a powder,

with a mixture containing Pot. Bromid. is, perhaps, the best medicinal treatment.

If worms should be the cause of the convulsions they should be treated accordingly.—*Students Journal and Hospital Gazette.*

TREATMENT OF THE DIARRHŒA OF PHTHISIS.

In the *Lancet*, Dr. C. Theodore Williams says, speaking of the peculiar diarrhœa of phthisis, that, arising from ulceration, it requires very careful attention. The great point to be kept in view is the healing of the ulcers, and this can only be attained by shielding them from all irritable substances, and by promoting a healthy granulating action. The treatment, in fact, resolves itself into three sets of measures.

1st. Rest in bed and the administration of only such food as can be quickly and easily assimilated without causing much distention of the intestine, or accumulation of flatus. Such are chicken broth, beef and veal tea, milk gruel, blanc mange, always combined with liquor pancreaticus, and prepared after the admirable methods of Dr. William Roberts of Manchester. Dr. Jagielski recommends koumiss specially in these cases.

2d. Warm applications to the abdomen, in the form of linseed poultices, turpentine stupes, or hot-water fomentations, to reduce the pain and promote a certain degree of derivation to the skin. If the pain be severe, I have found the application of a small blister over the area of tenderness on pressure, as recommended by Dr. J. E. Pollock, very advantageous. I have noticed, in some obstinate cases, that when the blister has risen, the diarrhœa has been considerably reduced, and pain existing in the abdomen at the same time has subsided.

3d. Internal medicines. When we have reason to believe that the ulceration is slight and confined to the small intestine, the diarrhœa may be treated by bismuth and opium, or by some astringents. The liquor bismuthi et ammoniæ citratis (B. P.) is a convenient form, but not always so effective as the powdered carbonate or the nitrate of bismuth in ten to twenty grain doses. Dover's powder combined with it in ten-grain doses is often effective. The most powerful astringent is the sulphate of copper in a quarter to half grain doses, combined with half a grain to a grain of solid opium. Of the various vegetable astringents I have found tannic acid in four-grain doses to answer best, far better than rhatany and catechu, but in all cases I combine it with a certain amount of opium, to reduce the irritability of the ulcers. Indian bael, especially a preparation of the fresh fruit, is often efficacious in checking the diarrhœa if the ulceration be limited. If, however, the ulceration attack the large intestine as well as the small, it is obvious that more local treatment is advisable, and recourse should be had to injections or supposito-

ries. The enema opii (B. P.) administered twice a day is sometimes sufficient, and may be strengthened by the addition of acetate of lead, four grains to an injection, or of tannic acid, five grains. This is a small injection, and it is doubtful how far its local effect reaches. Where the ulceration is very extensive, and involves the greater part of the large intestine, an attempt ought to be made to apply the remedies more thoroughly to the mucous membrane; and for this purpose injections of larger amount—from a pint to a pint and a half—may be used, consisting of gruel or of starch, or, best of all, of linseed tea, and all containing a certain quantity of opium (thirty to forty minims of the tincture). I would specially recommend the linseed tea, as it appears to exercise the same beneficial effect on the ulcers of the large intestine as it does in follicular ulceration of the throat. One of the most obstinate cases of intestinal tubercular ulceration I ever witnessed yielded to linseed tea injections, after almost every other treatment had been vainly tried, the ulcers apparently healing, the diarrhœa ceasing, and the patient living for two years afterward, and dying of pulmonary lesions. In cases where the stools are very fetid, I have added glycerine of carbolic acid to the injection with advantage. In many cases, however, it is desirable to give the large intestine as much rest as possible, and not to stretch the ulcerated mucous membrane through any distention by fluids: in these cases suppositories of morphia (from half a grain to a grain), or of the compound lead one, or of those of tannic acid, are indicated, and the treatment of the diarrhœa arising from lardaceous degeneration of the intestine is not very hopeful. Where the very channels of assimilation—viz: the villi—have undergone degeneration, as well as the various structures from which the succus entericus is poured out, it is difficult to see how treatment can restore the lost tissues. Dr. Dickinson's researches show that the loss of alkali is the chief characteristic of the disease. Dr. Marcet's analyses show that the chief chemical feature is deficiency of phosphoric acid and potash, and excess of soda and chlorine, and on this principle we should give phosphate of potash. When, however, the disease has so far advanced as to reach the intestine, it may be considered beyond any effective general treatment. We must be content to restrain the diarrhœa if we can, by astringents, the more powerful the better. Tannic acid in from two to four-grain doses, with dilute sulphuric acid, sulphate of copper or sulphate of zinc are the most useful, and injections of these substances do some good.

NITRO-GLYCERINE.

Prof. Wm. A. Hammond, of New York, read an important paper before the October meeting of the New York Neurological Society, on "Some of the Therapeutical Uses of Nitro-Glycerine," of which

we make the following abstract from the *Virginia Medical Monthly* :

Prof. Hammond has used this agent for the last two years, guided by the following facts : " If a drop of solution of Nitro-Glycerine in alcohol, in the proportion of one part in a hundred, be placed on the tip of the tongue, a sensation of fullness and pain in the head (mainly in the frontal region) is experienced in the course of three or four minutes. The fullness disappears in a short time. A dose of three or four drops of the strength mentioned, produces head-ache of much greater severity, and of longer duration. The carotid and temporal arteries pulsate with increased force ; the head feels as if it is about to burst open ; the face becomes red ; the action of the heart is augmented, and the respiration becomes more frequent. These symptoms are indicative of cardiac and vascular excitement, and of cerebral hyperaemia. We should, therefore, *a priori*, expect that nitro-glycerine would be useful in those cases in which it was desirable to stimulate the circulatory system, and to increase the amount of intracranial blood."

It is important to obtain a preparation of constant strength. The author uses that made by Boericke & Tafel, of New York, which is a ten per cent. solution. His formula is as follows :

R Nitro-Glycerine (one tenth) - - m. XL ;
Alcohol - - - - - f. 3 vi.

M. F. solutio.

One drop of this contains the one-hundredth (1/100) of a drop of nitro-glycerine ; and he always begins the treatment with the dose of one drop thereof. Great care must be taken that the apothecary puts up the prescription in exact accordance with the direction.

In sick headache (migraine) of the anæmic variety—that in which compression of the carotid artery on the painful side *increases* the pain—if treated with this agent, the suffering is immediately mitigated ; where compression *relieves* the pain, this remedy is worse than useless. In the anæmic variety, then, he gives one drop of this solution every fifteen minutes. He states that he has very rarely had to give the third dose.

But it is in epilepsy of the form known as *petit mal*, in which this preparation proves invaluable. One drop of the solution specified should be given three times a day, for a month ; then the dose increased to two drops thrice daily, increasing one drop per dose with the beginning of each succeeding month. This is generally well tolerated, and Prof. Hammond has given as high as twelve drops per dose in certain cases ; always beginning it with one drop and increasing it as above stated.

The effect of this treatment is first to diminish the frequency of the attacks of "epileptic vertigo," and generally to suppress them after a few months of treatment. Of course, the treatment should be kept up with regularity for a long time after the disappearance of the attacks. This treatment is of

especial value, as the bromides exert but little influence over this form of epilepsy.

THE PREVENTION OF OPHTHALMIA NEONATORUM.

Dr. K. Grossman has, in the *British Medical Journal*, the following valuable suggestions :—

The idea of preventing this disease by prophylactic measures has been crowned, as far as known till now, by a splendid success. In order to seize the evil at its root, Crédé, in Leipzig, carefully treated the least trace of vaginal catarrh of the pregnant woman, so that at the time of the confinement the fluor had quite vanished. He had some success ; but in a comparatively great percentage the outbreak of ophthalmia could not be prevented. The local treatment of the maternal passages, however valuable, did not prove sufficient ; and this result led to the experiment of disinfecting the eyes of all new-born children, without exception, as soon after birth as possible. In some cases, where a fluor albus existed, the disinfection of the eyes of the child was performed immediately after birth of the head, before the body was born completely ; and from the statistics obtained thus, you will judge yourselves with what success.

The method, which varies a little in the composition and strength of the lotions applied, is the following : Every child, without exception, whether of a healthy mother or of a mother suffering from leucorrhœa, must be subject to it as soon after birth as possible. The closed eyelids are washed and cleaned outside with a lotion of two per cent. carbolic acid. This having been done carefully, the eyelids have to be turned round, so that they form a complete ectropion, with the conjunctiva tarsi entirely exposed. Then, after carefully removing every trace of flaky secretion which may be found there, the conjunctiva has to be inundated with the two per cent. carbolic lotion for one to two minutes, care being taken that the lotion reaches every part of the conjunctival sac. This manipulation ought to be repeated three times daily during the first two days of life. Should the mother have had a very strong catarrh of the vagina, it will be valuable to pad the child's eyes, between the three times of cleaning, with a cotton-wool pad dipped in the same lotion, and renewed every half-hour during day-time.

You will object that this treatment, applied to every case of birth, is a great trouble and inconvenience for the practitioner, who is already hampered enough by his other duties ; but let me now show to you the statistics obtained by this method.

In Leipzig, at the Obstetric Clinique, the percentage of ophthalmia came down from 13.6 per cent. to 7.6 per cent. at first ; and in the following half-year there was, out of two hundred births, only one child subject to ophthalmia : and in this

one case the application of the lotions had, by neglect, been forgotten. In Halle, the percentage gradually came down from 12.5 per cent. to 6 per cent. and then to 3.6 per cent. It is obvious that in the beginning, when the nurses were not yet so well instructed, the percentage was yet comparatively great, and then decreased continually. My own statistics are yet small; the results of the experience gathered by me in two of the Liverpool workhouses are not yet numerous enough to be of a great weight, though, during the last four months, while the method was carried out, not a single case of ophthalmia neonatorum occurred. Those cases which I have treated privately, under my own personal care, are only five, but all of them were successful. In each of these cases the mothers brought to me a child which had lost the sight by ophthalmia neonatorum, and consulted me about this child's eyes. All these mothers being pregnant and suffering from fluor albus, I advised them to have the necessary measures taken, that the expected child might be saved from the sad fate of the previous one. They were only too glad to have all necessary precautions taken, and the result was a complete success.

TREATMENT OF CHOREA.

At the end of a paper on chorea, based upon an experience of one hundred cases (*British Medical Journal*, vol. ii., 1881, p. 145), Dr. William Strange speaks of the treatment, saying that the changes must be rung on the so-called nerve tonics, varying them according to the temperament of the child or to the collateral symptoms accompanying the choreic movements. If pallor, palpitations, and loss of weight exist, iron or arsenic, or both, will be necessary. If, on the contrary, the vascular system be sufficiently full and the motile element prevail, then the bromides with ammonia, or the succus conii, will be of most avail. Frequently whatever the condition of the vascular system and of the general nutrition, no good arrives until we have succeeded, by sedatives, in calming the excessive mobility of the nervous system. In these cases Dr. Strange has used the ice-bag to the spine and the ether spray to the nape of the neck, but not with much success. Direct calmatives—digitalis, belladonna, cannabis indica, with the bromides—answer the best.

The nervous symptoms once quieted, iron or arsenic may now be given, and carried to a somewhat high degree. Some have recommended large doses of arsenic, ten to fifteen minims of Fowler's solution; but Dr. Strange has seldom found that the stomach will tolerate these large doses, and has contented himself with much smaller ones, in combination with iron or zinc.

But, whatever the remedy selected, it will be necessary to continue its administration until it has produced its special physiological effect. Especially is this necessary with the neurotic

sedatives. Children bear large doses of belladonna and conium; and Dr. Strange has never found this class of remedies do much good until their full physiological effects (consistent with safety) have been produced.

Dr. Strange used some years ago to treat all his cases of chorea with wine alone, the port wine of the hospital, merely clearing out the primæ viæ, to make sure that trouble was not caused by entozoa or depraved alvine secretions. The amount given was three to six ounces daily, and all the cases got well. After suspending this treatment for some years, he has recently recommenced it with good results.

TREATMENT OF DYSMENORRHŒA.

Dr. G. W. Moss, of Paris, Mo., gives the following treatment of Dysmenorrhœa in the *St. Louis Courier of Medicine and Collateral Sciences*, for June, 1881:—

If called upon to prescribe for a patient in the midst of her suffering, if the menstrual flow has not begun, or is scant in quantity, I usually direct warm stimulating drinks, such as ginger, spice, or clove tea, the warm foot or hip bath. If the extremities are cold, with chilly sensations over the body, the patient is to be put to bed with hot brick or bottles of hot water to the feet and about the loins. If the bowels are constipated, give purgatives, usually calomel and rhubarb, or the compound cathartic pills. If the patient is plethoric, with flushed face and some excitement in the circulation, saline cathartics are preferable.

If the flow is still tardy or scant, assist the purgatives with copious injections of warm water. These failing to bring relief, I give compound spirit of ether, tincture hyoscyamus, spirits of camphor, each a half to one drachm, to be repeated, if necessary, until the flow becomes free enough. If the pain still continues, or is of a spasmodic character, the pulse rather weak, I find nothing better than ten to fifteen drops of aromatic spirits of ammonia, at the same time using as an injection into the rectum—

℞. Chloral hydrate,	grs. xx-xl	
Bromide potassium,	grs. xl-lx	
Tincture belladonna,	gtt. xx	
Water,	℥ iij-iv.	M.

And to this I frequently add tincture of assafoetida, or 30 to 40 drops of tincture of opium instead of the belladonna; and this prescription I have scarcely ever known to fail to give relief and rest to the patient.

Sometimes I use the hypodermic injection of morphia, but I am not partial to this mode of medication. If the patient is anæmic, and the pains of a neuralgic character, I have frequently found ten grains sulphate quinine, with one-fourth to one-third grain morphia, repeated two or three times, if necessary, to give more prompt relief, and to be more permanent in its effects than any other

remedies. Vaginal injections of warm water, sometimes with the addition of laudanum and belladonna, are soothing and grateful to the patient.

This outline of treatment, varied of course, to meet particular symptoms and individual peculiarities, I regard as applicable to all the forms of dysmenorrhea during the period of the menstrual flow.

During the intermenstrual period the treatment is directed with reference to the general condition of the patient. If she is anæmic or neuralgic, iron, with other tonics, is given, a favorite prescription, in the beginning, being the well known compound of blue mass, iron and quinine, with the view of equalizing the circulation, regulating the bowels and restoring secretions. Afterwards quinine, iron and strychnia, or nux vomica, warm baths, with friction to the skin frequently, flannel next the skin, and plenty of exercise in the open air, and this last not the least in my estimation.

In the plethoric the blood is as much at fault as in the anæmic, and for the purpose of reducing that fulness of habit, counteracting the tendency to local congestions and correcting the morbid condition of the blood, I know of no better treatment than an alterative course of mercury, followed by saline purgatives, with warm baths, frictions, open air exercise and plain diet. If the patient is of a rheumatic or gouty diathesis, I have found no remedy superior to that of Dr. Dewees, fifty years ago, or more, and that is colchicum and guaiacum.

The prescription of Dr. Fenner, of New Orleans, in nearly all dysmenorrhœal cases, and one that I have frequently used myself with good results, is—

℞. Gum guaiacum,	3 iv
Canada balsam,	3 iv
Oil sassafras,	3 j
Hydrag. chlorid. cor.,	gr. x
Rectified spirit,	℥ iv. M.

Of this is to be given ten or thirty drops, night and morning, commencing a day or two before the flow is freely established.

ANTISEPTIC TREATMENT OF LUNG-DISEASE.

I have for several years largely employed dry antiseptic inhalation in phthisis as an adjunct to general constitutional measures. The treatment I believe to be useful; but every case of improvement must not be attributed to the inhalation. The most suitable cases are those attended with profuse expectoration, especially when softening has commenced or cavities formed. The effect is sedative; in a large proportion of cases the expectoration diminishes in quantity and improves in quality, cough becomes less frequent and severe, and sounder sleep is enjoyed, enabling the patient to dispense with objectionable cough medicines.

The same effects may be noted when the general progress of the lung-affection is not arrested. I have never seen hemoptysis produced by its use. As a respirator I prefer a simple tin box, perforated and shaped to the mouth, introduced by Dr. Roberts, of Manchester. The patient is directed to place a few drops of the carbolic solution on the tow in the box, and to use the respirator for ten minutes after the morning cough, and at intervals during the day. Many habitually use it for hours while reading. If dryness and irritation of the mouth and throat be caused by the carbolic inhalation other remedies may be substituted—such as terebene and eucalyptus oil.

To produce an aseptic atmosphere the constant use of the vapor of carbolic acid in the sick-room has been recommended. Few can be induced to submit to this treatment, which I can not recommend.—*W. V. Snow, M.D., in Brit. Med. Journal.*

TREATMENT OF HÆMORRHOIDS.

Dr. Todd (*St. Louis Medical Courier*, September, 1881, p. 211) says that the first step in the treatment of recent cases is the administration of a saline cathartic: the best is sulphate of magnesium. After this the following pill may be used:

℞ Ext. colocynth. co.,	gr. xxx;
Ext. nucis vomicæ,	gr. xx;
Ext. belladonnæ,	gr. x.

Div. in pil. no. xl. One to be taken every evening on going to bed. More or less may be given, according to the effect produced, the object being to secure one full, soft evacuation daily,—neither more nor less. Relief from pain may be gained by the following:

℞ Iodoformi,	3 j;
Bals. Peruv.,	3 ij;
Ol. therobromæ et ceræ albæ,	a a 3 iss;
Magnesia calcinat,	3 j. M. bene.

Fiat in suppositoriæ no. xij. Insert one after each evacuation of the bowels, or, if necessary, oftener. Iodoform is a local anæsthetic of great power, and does not constipate.

Hæmorrhoids of long standing will only be benefited by this treatment, not cured. Dr. Todd's plan of radical treatment is as follows. All tumors found at the verge of the anus, and covered in part or wholly with integument, are clipped off with the scissors. If situated within the external sphincter,—the bowels having been moved with a dose of sulphate of magnesia given a few hours before,—the patient is placed over a vessel and directed to strain (a vessel filled with hot water is best). If the tumors do not come within reach in this way, the finger should be thrust into the bowel, provoking tenesmus, and the patient again be instructed to force the piles down. When within reach,—the nates being separated by an assistant,—the tumors are seized one by one with a forceps and held, while with the hypodermic syringe from five

to ten minims of a solution of nitrate of silver (one drachm to the ounce of distilled water) are injected into each, not stopping till all have been thus injected. No pain is felt except what is caused by handling parts rendered hypersensitive by protracted irritation.

One of the suppositories before mentioned may now be passed into the bowel, and thenceforth, if the treatment already given for removal of constipation be followed up assiduously and patiently, little further inconvenience will be felt and no further treatment required. Even though the suppository be omitted, little pain is felt, and the patient goes on once about his business. The tumors immediately become hard, atrophy, and in about ten days have wholly disappeared. They can only recur from the cause which first produced them. Dr. Todd says that he has not had occasion to repeat this little operation in the same individual but once, which was in the case of an old gentleman, in whom tumors located higher in the bowel subsequently came down and were cured by the same means,

POTASSIUM BROMIDE IN ORCHITIS AND INFLAMED BREASTS.

Dr. J. Grammer, M.D., says that, when consulted in time, he finds nothing else necessary, either in orchitis or milk breast, but potassium bromide, in five-grain doses, three times a day, or smaller doses, more frequently repeated. In advanced or complicated cases, of course, auxiliary measures should be used, if only as a precaution, or to expedite the cure, but he has never had the bromide to fail him even when used alone.

In orchitis, a suspensory should always be worn.

In some of these cases, he has seen the disease held in abeyance for weeks, when the patients would persist in the grossest imprudence, in walking and horseback-riding. He rarely restricts them in diet. Yet even these cases eventually recovered, without suppuration or atrophy,—neither of which results has he seen since he has used this remedy.

He has had no opportunity to test it in the metastatic orchitis of mumps, but is sure it will prove as useful as in the ordinary cases; and, though it is a specific inflammation, he expects to find it efficient in the next epidemic of parotiditis he may meet with.

Dr. Grammer has seen but one case of mammary abscess since he commenced the use of the bromide of potassium for such cases, and that case occurred not very long ago. The abscess had already pointed when he first saw it. He opened it, and prescribed potassium bromide, gr. ij, every three hours during the day: and in less than a week her husband reported the patient well. This, however, was not a fair test of the effect of the bromide on a mammary abscess for there was no infant to complicate or irritate the inflammation.

It was to Dr. Grammer a unique instance of the secretion of milk during pregnancy. The woman was four or five months advanced with her fourth child, and she stated that, being habitually rather irregular, she always recognized her pregnancy by the appearance of milk,—the secretion of which thenceforth continued.—*Virginia Med. Monthly*.

LOCAL TREATMENT OF CHRONIC METRITIS.

Prof. Amann, of Munich, read a paper on this subject at the London Congress, of which the following is an abstract:—

Most cases of chronic metritis require local treatment for their cure. If the disease be limited to the mucous membrane of the cervical canal the treatment is comparatively simple, and cure can be affected by various harmless means. Greater difficulty is met with when chronic inflammation of the body or of the body and neck of the uterus calls for local treatment. For many years I have carefully tested the various means recommended during the last twenty years in the treatment of the affection in question, in hospital and private practice, in more than 3000 cases, and have come to the conviction that only one method acts with certainty without being troublesome and dangerous. This is new only in the manner of its execution, and consists in the systematic cauterization of the cavity of the body and eventually of the cervix of the uterus by means of an instrument like a sound, into a hollow in the upper end of which is fused *lapit mitigatus*. This can be employed, as is self-evident, according to the behaviour of the endometrium, and the resisting power of the uterus in individual cases, at one time more frequently and thoroughly, at another more rarely and cautiously, and will have, according to the peculiarities of the special case, by itself alone, or in conjunction with other means (topical blood-letting, scraping off of growths of the endometrium), almost sure results. Only in a few cases of large tumours or severe bleeding granulations of the endometrium is the employment of the galvano-cautery or thermo-cautery necessary. The intra-uterine application of *lapis mitigatus* is, with the necessary caution, absolutely free from danger, and in a small number of cases only does it cause pain, which, however, is usually of short duration; sometimes also it gives rise to considerable but transient bleeding. Once only have I noticed, after a severe cauterization of the whole of the uterine cavity, dangerous metritis or perimetritis, which, however, ended in a few weeks in complete recovery. Even slighter degrees of acute endometritis and acute metritis occur according to my experience in barely 2 per cent. of all the cases.

TREATMENT OF PLEURISY WITH JABORANDI.

Prof. Bouchut (*Med. Chir. Rundschau*) has obtained good results from the use of jaborandi in pleurisy. He gives the following details of a case: A girl, aged seven, was brought on the 5th of February to the hospital; for two days she had experienced rigors, fever, headache, and vomiting. At the time of admission she had an evening temperature of 38.2°C ., the pulse-rate being 95; there was much dyspnoea and the patient complained of a "stitch" in her left side. Examination showed that there was pleurisy with exudation on the left side, with displacement of the heart, the apex beat being felt one centimeter from the sternum. On the 6th of February three grams of jaborandi were given; in the evening there was no stitch and no dyspnea. On the 7th of February it was noted that the patient had passed a good night, and that there was no increase in the exudation. Jaborandi three grams. On the 8th of February vesicular breathing was audible as far as the middle of the sternum. Jaborandi three grams. On the 9th of February vesicular breathing could be heard all over the chest; the heart was in its normal position; there was no fever. On the 10th of February all the symptoms of pleurisy had vanished. The patient continued to take three grams of jaborandi daily until the 20th. The exudation did not return, and there was complete recovery. The author adds, as a warning, that jaborandi acts chiefly upon the salivary glands in children, and only slightly upon the sudoriparous glands.—*Lond. Pract.*

ON THE TREATMENT OF SOME FORMS OF PNEUMONIA.

I wish to draw attention to the remarkable effects produced by the perchloride of iron, combined with hydrocyanic acid, in cases of pneumonia of a low type, especially those due to blood-poisoning. Most practitioners will agree in having seen cases of pneumonia run a course so like in its general aspect that of erysipelas as to lead them to imagine that they might be due to a similar cause, taking effect in the interstitial substance of the lung, instead of in the subcutaneous tissue. I have seen many such, and I have begun to apply a similar treatment, with, as I say, truly marvelous effects. The first case of the kind in which I ventured on this treatment was that of Mrs. G., aged thirty-five, who had double pneumonia, with pleurisy on the right side, in February of last year. When I first saw her the pulse was 140, the temperature in the axilla 103° , and the sputa of a deep rust color. I ordered mustard and linseed poultices, and the following mixture: \mathfrak{R} Li-
quoris ferri perchloridi fort., 3ij; acidi hydrocy-
anici (Scheele) Mviiij; aquam ad., \mathfrak{z} viij. M. Two
teaspoonfuls to be taken every hour, with an inter-
vening teaspoonful of brandy in water. After

thirty hours the pulse had fallen to 100, the temperature to 99° , the sputa were entirely devoid of blood, and the breathing was almost normal. This patient made a rapid recovery.

In the last case of the kind coming under my notice, which occurred last week, the patient seemed to be in a state of collapse or syncope; the pulse was 144; the breathing in short gasps; the finger-ends, as seen through the finger-nails, of the color of a thunder-cloud; and both lungs in a general state of clog. Delirium also lasted a whole night. She had complained of shortness of breath, and had a phthisical aspect and family history, but had never had any cough until the present time. I ventured upon the same treatment with her, and her pulse is now 96, temperature all but normal, sputa devoid of blood or discoloration of any kind, and she herself anxious to get up.—*D. Biddle, in Brit. Med. Journal.*

SUTURES IN RECENT RUPTURES OF THE PERINEUM.

Dr. Veit advocates the immediate union of even the lesser ruptures of the perineum. To accomplish this there is need of no elaborate armamentarium—only needles and scissors are necessary. Dr. Veit recommends to begin at the perineum with the sutures; avoid deep vaginal sutures, only superficial ones are necessary. After bringing the rectal mucous membrane together the needle is passed through the perineum behind the frenulum and carried along parallel to the rupture in the vagina to the end, where it is brought through the skin. Other deep sutures can be entered under this; superficial stitches, if necessary, are placed between the deeper ones. Chloroform is only necessary in cases that are not operated upon immediately post partum.—*Medical Press and Circular.*

TREATMENT OF GONORRHOEA BY THE INTERNAL ADMINISTRATION OF CHLORATE OF POTASH.

Zeitlin (*Med-chirurg. Rundschau*, May, 1881) has treated fourteen cases of uncomplicated urethritis with chlorate of potash, given internally in daily amounts of three grammes, as recommended by Dochman. The results have been uniformly favorable. After a few doses, pain and erections ceased, the discharge became less free and thinner, and a cure was soon obtained without the intervention of any of the disagreeable and serious symptoms (hæmoglobinuria, collapse, etc.), which of late have so frequently been attributed to chlorate of potash. The action of the remedy is due to its rapid excretion by the kidneys in an unchanged form, and its local effect upon the urethral mucous membrane. It may be remembered that the drug has also been used in the form of urethral injections, and has been given internally in cystitis, whether of gonorrhœal or other origin, with good results.

AMENORRHOEA.

In cases of this nature, due to torpid action of the ovaries, Dr. Goodell orders the following prescription :

℞ Ex. aloes..... 3j ; 4.00 Gm. ;
 Ferri sulph. exsic..... 3ij ; 8.00 Gm. ;
 Assafoet..... 3iv ; 16.00 Gm.

M. et in pil. No. c, divide.

Sig. One pill to be taken after each meal ; this number to be gradually increased, first to two and then to three pills after each meal. If the bowels are at any time over-affected, the patient is to stop and begin again with one pill.

Where the amenorrhœa is due to arrested development Dr. Goodell has derived the very best results from the constant use of Bland's pill, as recommended by Niemeyer :

℞ Pulv. ferri sulph..... } aa 3ij ; 8.00 Gm. ;
 Potas. carb. puræ..... }
 Mucil. tragacanth..... q. s.

M. et in pil. No. xlviii, divide.

Sig. To be given daily, in increasing doses, until three pills are taken after each meal.

This gives the large quantity of twenty-two and a half grains of the dried sulphate of iron per diem.

If these pills give rise to constipation, Dr. Goodell uses this formula :

℞ Pulv. glycyrrh. rad. } aa 3ss ; 15.00 Gm. ;
 Pulv. sennæ..... }
 Sulph. sublim..... } aa 3ij ; 8.00 Gm. ;
 Pulv. feniculi..... }
 Sacchar. purif..... 3jss ; 45.00 Gm.

M. Sig. One teaspoonful in half a cupful of water at bedtime.

Where the suppression is due to change of habits and loss of health, tonics are employed. When the suppression comes on suddenly, from cold or exposure while in the midst of the menses, and is accompanied by severe lumbar pains, the patient is placed in a mustard hip-bath, a Dover's powder is administered, she is put to bed, and hot drinks are given to provoke copious diuresis and diaphoresis.—*Medical Record*.

TINCT. FERRI PERCHLORIDI.

Dr. Reed, Professor of Materia Medica in the Montreal College of Pharmacy, observes that, notwithstanding so many new preparations of iron have been brought forward, this old tincture still holds its place in spite of the unpleasantness of its taste. There is, he says, a simple method of dealing with it which is not so widely known as it deserves, and which consists in merely adding a little alkaline citrate. For every dram of the tincture add half a dram of citrate of potash. The liquid is then converted into a beautiful green color, and is quite free from the peculiar roughness

of the iron. For a tablespoonful dose, containing ten minims, the prescription may be—

Tinct. ferri mur..... 3ij ; 8.00 fl.Gm. ;
 Pot. cit..... 3j ; 4.00 Gm. ;
 Syr. limon..... 3jss ; 45.00 fl.Gm. ;
 Aquæ, ad..... 3ij ; 60.00 fl.Gm.

Another advantage of the mixture is that astringent tinctures—as bark, gentian, etc.—may be added without decomposition.—*Canada Med. Journal*.

Sometimes the interior of the nares feels very sore from erosions, or crusts are forming in consequence of catarrhal affections. Zinc ointment applied freely by means of a camel's-hair brush acts like a charm, a single application often being sufficient.

ASTHMA.—

℞ Tinct. lobeliæ..... 3ii.
 Ammon. iodi..... 3iii.
 Ammon. brom..... 3iv.
 Syrup. tolut..... 3iv.

M. Sig.—A teaspoonful every four hours.
 —*Virginia Medical News*.

THE CANADA MEDICAL RECORD,

Monthly Journal of Medicine and Pharmacy.

EDITORS :

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INSANITY AND DIVORCE.

Some time ago a Commission was appointed in Paris to investigate the question of Divorce, and determine what circumstances should in future be accepted as valid reasons for the dissolution of the marriage tie. M.M. Charcot, Blanche and Legrand du Saulle have recently appeared before this Commission, and testified that, with some reservations, insanity should not hold in law as a plea for divorce. According to the *British Medical Journal*, a writer in the *Gazette Hebdomadaire* warmly endorses the opinion of

these eminent men, and in support of it advances the following reasons :—

1st. *No disease* occurring after marriage, not even impotence, justifies divorce; insanity being due to a diseased condition of the nervous system, can therefore no more justify divorce than any other form of disease. The insane suffer in their moral and intellectual, as well as in their physical health, and consequently deserve even greater consideration and care from their friends than those afflicted with ordinary ailments. In many cases, it is true, strict precautions must be taken to guard against the effects of mental loss of balance, but these do not necessitate either divorce or separation.

2nd. *Chronic Insanity*, although often incurable, is not necessarily so. It would be both cruel and unjust to make it legally possible for a married man to return to his home after an unexpected recovery from chronic insanity, to find his wife divorced from him and wedded to some other man. The form of Dementia known in France as *Folie Circulaire* often yields such surprises. M. Blanche cites one case of this kind in which, after sixteen years, recovery eventually took place. *General paralysis* is admittedly incurable; yet such long and complete remissions do sometimes occur as to deceive even the most experienced practitioners, the disease seems permanently arrested, and the patient leaves the asylum and returns to his family. With regard to those hopeless cases which are manifestly passing from bad to worse, Charcot maintains that the plain duty of the family is to redouble every possible attention, and wait patiently for the inevitable end, rather than seek for relief by divorce. *Epilepsy*, though generally continuous and a fruitful cause of insanity, is nevertheless sometimes limited to two or three attacks, then disappears never to return. According to Foville, such epilepsies occur chiefly in the young, and are most frequently connected with the eruption of the wisdom teeth. Epilepsy is sometimes caused by the irritation of intestinal worms; the case of a librarian is cited where epileptic attacks ceased after the expulsion of a tænia, and did not return during the remaining fifteen years of his life. Chronic insanity should not therefore be admitted as a reason for divorce.

3rd. It is by no means uncommon to meet with persons sufficiently wanting in the moral sense to speculate by marriage on the diseased condition of their fellow creatures. Those affec-

tions which are slow in presenting their true character, but are not unfrequently recognizable in their early stages, such as phthisis and insanity, are particularly adapted to this kind of calculation. The prospect of divorce would be yet another encouragement, and so much the more tempting as regards dementia, that it would be more easy to accomplish an act of spoliation in the case of a person of weak intellect after marriage.

LOCOMOTOR ATAXIA AND SEWING MACHINES.

Gynecologists have long pointed out the numerous derangements of the female pelvic viscera, directly traceable to the continued or immoderate use of the sewing machine. It seems, however, that, besides uterine troubles, other grave disorders may arise from the same cause. In the *Union Medicale* M. Octave Guelliot reports two cases of locomotor ataxia in women, which he attributes to the habitual use of the sewing machine. His theory is that the treadle-movement produces a sort of concussion, which is gradually diffused throughout the spinal cord: he believes that hysterical women are most apt to be thus affected. The first symptoms are sharp shooting pains in the lower limbs, which tend to spread rapidly upwards, are relieved by rest, but return when the treadle work is resumed. M. Guelliot argues strongly for the discontinuance of the treadle and the introduction of some other mechanical motor.

POISONING BY TINNED MEATS.

According to the *British Medical Journal*, a whole family at Northampton, consisting of five persons, have recently had a narrow escape from poisoning. After partaking of tongue from a hermetically-sealed tin they all suffered from symptoms of irritant poisoning due to verdigris caused by imperfect sealing.

MCGILL UNIVERSITY.

FACULTY OF MEDICINE.

The Annual Convocation of the Medical Faculty of McGill University was held in the William Molson Hall on Friday afternoon, the 31st March. The chair was occupied by Chancellor Day, who was surrounded by the Governors,

Fellows, and Professors of the University. The attendance was very large. Dr. Osler, Registrar of the Faculty, read the following report of the past session.

The total number of students enregistered in this Faculty during the past year was 154, of whom there were, from—

Ontario, 75; Quebec, 33; Nova Scotia, 6; Manitoba, 2; New Brunswick, 8; P. E. Island, 8; Newfoundland, 2; West Indies, 1; United States, 19.

The following gentlemen, 33 in number, passed their Primary Examination on the following subjects: Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica and Pharmacy, Institutes of Medicine and Botany or Zoology. Their names and residences are as follows:

James L. Addison, West Flamboro, Ont.; George Carruthers, North Bedeque, P.E.I.; S. E. Cook, Aultsville, Ont.; T. B. Davies, Ottawa, Ont.; J. A. Duncan, Duncanville, Ont.; E. J. Elderkin, Apple River, N.S.; Hugh Gale, Elora, Ont.; C. E. Gooding, Barbadoes, W. I.; G. A. Graham, Hamilton, O.; W. G. Henry, Chatham, O.; J. R. Johnson, Farmersville, O.; Wyatt G. Johnston, Sherbrooke, Q.; Ovide Martel, Montreal, Q.; J. C. Meahan, Bathurst, N.B.; J. J. Maher, Albany, N.Y.; John Menzies, Pembroke, O.; N. J. McDonald, Mount Stewart, P.E.I.; J. P. McNernay, Kingston, N.B.; Isaac N. McLean, B.A., Pictou, N.S.; J. W. McLean, Strathlorne, N.S.; Arch. McLeod, B.A., Orwell, P.E.I.; Alex. McNeill, Charlottetown, P.E.I.; W. M. Nelson, Montreal, Q.; S. S. C. Phippen, Parkhill, O.; William Porteous, Pembroke, Ont.; W. Scott Renner, Jordan Station, O.; W. K. Ross, Goderich, O.; George B. Rowall, Abbotsford, Q.; E. H. Smith, Prescott, O.; Herbert E. Smyth, Worcester, Mass.; Felix D. Walker, Launching, P.E.I.; S. F. Wilson, M.A., Springfield, N.B.; E. S. Wood, Faribault, Minn.

The following gentlemen, 27 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University. These exercises consist in examinations, both written and oral, on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence and Hygiene,—and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:

Chas. O. Brown, Lawrenceville, Q.; Benj. W. Burland, Port Kent, N.Y.; Lorne Campbell, Montreal, Q.; Angus M. Cattanaach, Dalhousie Mills, O.; Edmund Christie, Lachute, Q.; W. C. Cousins, Ottawa, O.; William J. Derby, North Plantagenet, O.; W. T. Duncan, Granby, Q.; H. A. Dunlop, Pembroke, O.; Rankin Dawson, B.A. (McGill), Montreal, Q.; Hugh Gale, Elora, O.;

James A. Grant, B.A. (Queen's), Ottawa, O.; Robt. J. B. Howard, B.A. (McGill), Montreal, Q.; B. F. W. Hurdman, Aylmer, Q.; R. F. Klock, Aylmer, Q.; R. K. C. McCorkill, Montreal, Q.; A. R. McDonald, Trinity, Texas; T. N. McLean, Perth, O.; W. J. Musgrove, West Winchester, O.; Henry V. Ogden, B.A. (Trinity), St. Catharines, O.; T. J. Pierce O'Brien, Worcester, Mass.; Henry O'Keefe, Lindsay, Ont.; Clarendon Rutherford, M.A. (Union), Waddington, N.Y.; Alex. Shaw, Seaforth, O.; E. W. Smith, A.B. (Yale), West Meriden, Conn.; W. E. Thompson, Harbour Grace, Nfld.; H. W. Thornton, B.A. (McGill), Montreal, Q.

The degree was then conferred by Principal Dawson on the above gentlemen.

Messrs. Howard and Campbell, natives of the Province of Quebec, have fulfilled all the requirements for graduation, but await the completion of four years from the date of passing the matriculation of the Provincial Board before receiving the degree.

Dr. O'Brien of Worcester, Mass., U.S., delivered the valedictory on behalf of the graduating class. Professor McCallum, M.D., gave the parting address on behalf of the Faculty.

MEDALS, PRIZES AND HONOURS.

The Holmes Gold Medal for the best Examination in the Primary and Final Branches was awarded to Robert J. B. Howard, B.A., Montreal.

The Prize for the best Final Examination was awarded to H. V. Ogden, B.A., of St. Catharines, Ont.

The Prize for the best Primary Examination was awarded to George A. Graham, of Hamilton, Ont.

The Sutherland Gold Medal was awarded to Wyatt G. Johnston of Sherbrooke, Q.

The Morrice Scholarship in Physiology was awarded to Wyatt G. Johnston, of Sherbrooke, Q.

The following gentlemen, arranged in the order of merit, deserve honourable mention:—

In the Final Examination, H. V. Ogden, B.A., H. W. Thornton, B.A., Rankin Dawson, B.A., E. Christie, Alex. Shaw, and W. T. Duncan.

In the Primary Examination, G. Carruthers, G. B. Rowell, C. E. Gooding, W. G. Johnston, F. D. Walker, E. J. Elderkin, Alex. McNeill, W. G. Henry and Arch. McLeod, B.A.

PROFESSOR'S PRIZES.

BOTANY.—First Prize, Edwin G. Wood, of Londesboro, O.

FOR THE BEST COLLECTION OF PLANTS.—W. W. Doherty, of Kingston, N.B.

PRACTICAL ANATOMY.—Demonstrator's Prize,

awarded to George Carruthers, of Charlottetown, P.E.I., who was closely pressed by Chas. E. Gooding, of Barbadoes.

UNIVERSITY OF BISHOP'S COLLEGE.

FACULTY OF MEDICINE.

The eleventh Medical Convocation for conferring degrees in Medicine was held in the Synod Hall, Montreal, on the 5th April. There was a large attendance, the Hall being completely filled, the fair sex predominating. Among those present, graduates of the School who had come to the City to attend the Convocation, was Dr. Gravely, Cornwall; Dr. Mitchell, Bedford; and Dr. Gill, Drummondville; and of the graduates practicing in the city who were present we noticed Drs. Wood, Jenkins, Gaherty, Kannon, and J. Leslie Foley. The majority of the Faculty were present. The chair was occupied by Vice-Chancellor Norman, in the absence of Chancellor Henecker, who is absent in England. In opening the proceedings Vice-Chancellor Norman said:—

Our Convocation to-day closes the eleventh session of the Medical Faculty of Bishop's College. This Faculty has now secured a firm and recognized position. Its promoters and professors have had to fight a hard battle, but they have displayed those qualities which ensure success in the long run. They have never lost heart, and never relaxed their energies. They have labored for no private or selfish ends. They have not striven for personal emolument. Opposition has not daunted them, nor difficulties quenched their hopefulness. When such courage, such laborious and self-denying industry are combined with intellectual knowledge and professional experience, the struggle may be protracted, the issue may be long delayed, but the result cannot be doubtful. This, the eleventh session of this Medical School, has been the most successful in its history. We may say without hesitation that the School is a fact, stubborn, living, that refuses to be passed over or ignored. Montreal is proud, and justly proud of the Medical Faculty of McGill College, but events have proved that there was room for one more, and that nothing but a sentiment of honorable rivalry need exist between such institutions. That the Medical School of Bishop's College has gained a distinguished place in the estimation of the community at large, and is highly appreciated by them, is evidenced by the large number of young

men who, in commencing the study of medicine, have selected Bishop's College as their Alma Mater and place of instruction. The stream is flowing steadily. May it never cease to flow, and may in this instance the words of the Roman poet prove true, "Labitur et labetur." It is gratifying to the authorities of Bishop's College to know that a graduate in Arts of their University, who has, devoted himself to the medical profession, has succeeded this year in carrying off the two highest prizes, viz., the Nelson Gold Medal, for special examination in surgery, and the Wood Gold Medal awarded to the student who takes the highest number of marks in the primary and final examinations. I am alluding to Mr. Heber Bishop. This is one of the proofs of the value of general education of a high order, as the prelude to and foundation of a special and technical course of study. Some two or three years ago, on the occasion of a similar gathering, I remarked that Bishop's College was a cosmopolitan institution, and that its members were to be found in well nigh every quarter of the globe. This remark is at the present time more correct than ever. As the sun never set on the domains of ancient Spain, as the same vaunt holds good of modern England, as "the Queen's drum beats round the world," so we may almost say that on whatever great country the sun's light falls, *there* are to be found medical graduates of Bishop's College. At all events, they are to be met with in England, India, China the West Indies, Panama, California, several of the United States, as well as in every Province of this great Dominion. They are doing what they can to uphold the reputation of their University, and to ensure the permanent success of this Medical Faculty. I trust that the gentlemen who will this day receive their credentials and attain the distinction which they have long desired will ever bear in mind that on them, in a great measure, will depend the good name of their Alma Mater. They can either adorn her by their professional skill, their industry, the comfort and happiness which they can be the means of bestowing on suffering fellow creatures and sorrowing or anxious hearts, and not least by the purity, integrity and self-devotion of their lives, or they can sully her fair fame and detract from her position by careers of idleness, self-indulgence and dissipation. I have stated in merely general terms that great success has attended this medical school during this, its eleventh session. I leave all matters of

detail to the report which in a few moments we shall have the pleasure of listening to. But before resuming my seat I must allude to one circumstance which casts something of a shadow on the brightness of this auspicious day. I allude to the enforced absence of the Venerable Dean of this Medical Faculty, Dr. David. For the first time since this school was established he has found himself unable to attend the Medical Convocation. Last year, though ill and suffering, he was among us, taking part in our proceedings and comporting himself with that mingled cheerfulness and courage which are characteristic of his nature, and which no doubt concealed the real feebleness of his bodily condition from many who met and conversed with him. But this year's increased infirmity precludes even his presence here and retains him at home. I am sure that in his weakness and seclusion it will be a pleasure for him to know that we sincerely deplore his absence and its cause, and that he is held in respect and esteem not only by his colleagues and the students of the Faculty, but by all those who had the privilege of his acquaintance.

Dr. F. W. Campbell, Registrar of the Faculty, then read the annual report, which was as follows:—

REPORT OF THE SESSION 1881-82.

Before going into the details of the work of the past season I desire, upon behalf of the Faculty, to express their deep regret at the absence of our venerable Dean. From its organization he has been present at every Convocation; and we now for the first time meet without him. A year ago, struggling against bodily infirmity, his well-known energy carried him through the entire meeting. This year, although with us in thought and sympathy, his strength is such that he is unable to leave the house, and the duty of representing him falls upon me. I am sure this assembly join heartily with the Faculty in the hope that his life may be yet spared many years, and that his heart may be warmed by increasing success attending Bishop's College Medical School.

In the report read at last Convocation it was stated "that the outlook was brighter than it ever had been," and it is my pleasing duty to announce to-day that the prediction then made of future success has been amply verified in the session which closes with this afternoon's proceedings.

The number of matriculated students for the session 1881-82 was 53, being 21 in excess of last

year; of this number two (2) were from the Province of Ontario, one (1) from New Brunswick, one (1) from Nova Scotia, one (1) from Jamaica, two (2) from the United States, and forty-six (46) from the Province of Quebec. Twenty-eight were students commencing the study of medicine.

The following are the results of the examinations, and the gentlemen named have passed in the subjects named:—

Botany—Frank R. England, Dunham, P. Q. (Prizeman); Charles Lafontaine, Chambly; Ernest Bronstorff, Jamaica, W. I., first-class honors. Henry Johnstone, Montreal; Charles E. Parent, Waterloo; Wm. G. Nichol, Montreal; Frank J. Nelson, Montreal; Charles Ulric, Chambly; E. O. Laferriere, St. Cuthbert; Wm. D. Nutter, Montreal; Jas. A. Shepstone, Brantford, Ont.; E. Sirois, Montreal.

Practical Chemistry—J. B. Saunders, Montreal, first-class honors. R. C. Blackmer, Stockbridge, Vt.; E. Sirois, Montreal; Edgar O'B. Freligh, L'Orignal.

Practical Anatomy—E. Sirois, Montreal (Prizeman); J. A. Caswell, Digby, N.S.; J. B. Saunders, Montreal, first-class honors.

Anatomy—J. A. Caswell, Digby, N.S., first-class honors; E. Sirois, Montreal; J. B. Saunders, Montreal; Walter Prendergast, Montreal; G. A. Balcom, Campbelltown, N.B.

Physiology—J. A. Caswell, Digby, N.S.; J. B. Saunders, Montreal, first-class honors. G. A. Balcom, Campbelltown, N.B.; W. D. M. Bell, New Edinburgh, Ont.; E. Sirois, Montreal.

Materia Medica—W. D. M. Bell, New Edinburgh, Ont., first-class honors; J. B. Caswell, Digby, N.S.; G. A. Balcom, Campbelltown, N.B.; W. H. Drummond, Montreal; E. Sirois, Montreal; William Patterson, jr., Montreal.

Chemistry—J. B. Saunders, Montreal, first-class honors; J. A. Caswell, E. Sirois, W. H. Drummond, Edgar O'B. Freligh, G. A. Balcom.

Hygiene—J. B. Saunders, G. A. Balcom, first-class honors; Edgar O'B. Freligh, Walter Prendergast, W. D. M. Bell, Jas. A. Shepstone.

Medical Jurisprudence—John W. Cameron, Montreal; W. D. M. Bell, G. A. Balcom, first-class honors; Edgar O'B. Freligh, William Patterson, jr.

The following gentlemen have passed their primary examination, consisting of anatomy, materia medica, physiology, chemistry, practical chemistry and practical anatomy:—J. B. Saunders, Montreal,

Q., first-class honors and "Dr. David" Scholarship (for highest number of marks in the primary branches); J. A. Caswell, Digby, N.S., first-class honors; G. A. Balcom, Campbelltown, N.B.; E. Sirois, Montreal, Q., second-class honors; W. D. M. Bell, New Edinburgh, Ont.; Walter Prendergast, Montreal, Q.

The following have passed their final examinations for the degree of C.M., M.D., consisting of practice of medicine, surgery and obstetrics, pathology, medical jurisprudence, clinical medicine and clinical surgery. These ten last examinations are held at the bedside in the Hospital as a test of the ability of the candidate to put his theoretical knowledge into practice. Heber Bishop, B.A., Marbleton, Q., first-class honors and Wood Gold Medalist. [This medal is awarded to the graduate who has attended at least two six months sessions at Bishop's College, and at the final examination has obtained the highest number of marks on all the subjects of professional examination.] Ninian C. Smillie, Montreal, first-class honors and Chancellor's Prize; John W. Cameron, Montreal, first-class honors; Wm. D. M. Bell, New Edinburgh, Ont., Geo. A. Balcom, Campbelltown, N.B., second-class 60 per cent. honors. Walter Prendergast, Montreal.

The "Robert Nelson" Gold Medal, awarded for special excellence in surgery, was won by Heber Bishop, B.A. This medal is valued at \$60, and is for the best special examination in surgery, written-oral and practical, open to all candidates who have taken first [75 per cent.] honors in all subjects, of the final examination, and who have attended at least two months sessions at Bishop's College.

HONOR LIST.

"Wood" Gold Medal and "Nelson" Gold Medal—Heber Bishop, B.A.

Chancellor's Prize—Ninian C. Smillie.

David Scholarship—J. B. Saunders.

Practical Anatomy—Senior Prize, E. Sirois.

Practical Anatomy—Junior Prize, R. C. Blackmer.

Botany Prize—F. R. England.

The following gentlemen will receive honorable mention in the undermentioned subjects:—

John W. Cameron, final examination.

J. A. Caswell, primary examination.

W. D. M. Bell, Medical Jurisprudence, Materia Medica.

G. A. Balcom, Hygiene, Medical Jurisprudence.

Charles Lafontaine, Botany.

Ernest Bronstorff, Botany.

In concluding this report I desire to state during the past winter the Faculty expended a large sum of money in fitting up a Practical Physiological Laboratory, and that we now possess the most complete Physiological Laboratory in Canada. Our prospects for the next session are most encouraging, and with the kindly aid of our friends we feel that the growth of Bishop's College School will keep pace with the wants of the Dominion.

Principal Lobley presented for the *ad eundem* degree of C.M., M.D., on recommendation of the Faculty, Dr. J. B. Gibson (M.D., McGill) of Cowansville, P.Q., and Dr. A. D. Stevens (M.D., McGill) of Dunham, P.Q., and the degrees were conferred by Vice Chancellor Norman.

Dr. W. D. M. Bell, of New Edinburgh, Ont., delivered the Valedictory on behalf of the graduating class, and Professor Armstrong on behalf of the Faculty gave the Valedictory to the students. Several addresses were delivered by friends, the most notable of which was one by Judge Mackay, a Governor of McGill University. He said he was not a fanatic in support of McGill College or any other institution with which he was connected. It had been said that there were too many colleges in the Province of Quebec, but he did not think this was the case, and he thought that there was plenty of room both for McGill and Lennoxville. He might say that he was wonderfully astonished at the work of Bishop's College Medical School as shown by the proceedings to-day, and he would carry away most agreeable impressions of it. He advised the graduates to pay attention to the advice that had been given them, and urged them to continue their study throughout their whole life. He had also heard with great satisfaction of the progress of the College at Lennoxville, and he hoped it would have continued success. This he knew was the sentiment also of McGill College, and if there was any rivalry at all between the two institutions it was only a fair and honest one.

HOSPITAL NOTES.

Montreal General Hospital.—During the early part of last month *nephrotomy* was successfully performed by DR. RODDICK upon a girl of twenty, who had for six years been suffering from frequent and painful micturition, the urine voided being small in quantity, and more or less mucopurulent

and bloody. At twelve years of age the patient had an attack of so-called *spinal fever* (?), at fourteen a severe sciatica, and shortly afterwards her urinary troubles began. Most of the ordinary methods of treatment were tried without much benefit; an examination was made for calculus, with negative results; rapid dilatation of the urethra was practised, several small villousities were removed from the mucous surface of the bladder, and weak nitric acid injections employed, but without any marked or permanent relief. Meanwhile, in spite of constant and careful treatment, the urine became gradually more purulent, and the patient's general health steadily declined. Last July chills and fever set in, accompanied by vomiting, alternating constipation and diarrhoea, and pain over the right kidney with tenderness upon pressure. By October a well-defined tumor could be made out in the right hypochondrium—a hypodermic needle was inserted, but failed to reach pus. From that time her decline was rapid, and although the appetite kept uniformly good emaciation became extreme. On admission to hospital, a distinct fluctuating tumor was found occupying the right hypochondriac and lumbar regions. The urine, which was passed every half hour, was scanty, and contained mucus and pus in abundance.

The presence of pus in the tumor having been discovered by means of the aspirator, nephrotomy was performed with strict antiseptic precautions. A transverse incision was made in the loin, midway between the border of the ribs and the crest of the ilium, and about twenty ounces of putrid, foul-smelling pus with a urinous odor came away; the sac was secured to the edges of the wound with silk sutures. A careful digital examination revealed extensive disease of the kidney structure, but no concretions. The cavity was thoroughly washed out with a carbolic solution (1 x 40) a large-sized drainage tube inserted, and antiseptic dressings applied. On the third day symptoms of carbolic acid absorption having appeared, a twenty per cent. boracic acid solution was substituted. The operation has so far proved a complete success; the chills and fever have disappeared—the urine has increased in quantity, is passed painlessly, and at longer intervals. The strength and general condition of the patient improved so rapidly after the operation, that on the sixteenth day she was able to be removed to her own home.

On the 25th February, a man, who has been long

and favorably known in Montreal in connection with the fire brigade, was admitted into Hospital with extensive injuries produced by the bursting of a rapidly-revolving emery wheel. A large fragment struck the patient on the left side of the face, wounding the soft parts along the nose and lower margin of the orbit, tearing both eyelids, crushing in the superior maxillary bone, destroying the eyeball and fracturing the floor of the orbit towards its outer angle, the roof of the orbit being uninjured. A line of fracture ran through the roof of the mouth, but there was no separation of the fragments. A large piece of emery was removed from the interior of the antrum, and several smaller pieces from the orbit. After the parts had been thoroughly cleansed, that portion of the maxillary body which remained was attached to the nasal process with silver wire sutures, and the flaps of skin brought together by means of silver wire and catgut. The orbit was packed with lint soaked in carbolic acid solution, carbolized dressings applied to the face, and constant irrigation of the parts with a weak carbolic lotion kept up for several days. The case made an uninterrupted recovery, the wound healed rapidly, leaving only a slight scar, and the patient was discharged on 13th March.

Notre Dame Hospital.—The House Surgeon's report for the six months ending 31st January has just been received. The proportionately large number of surgical cases treated in both the Indoor and Outdoor Department is quite noticeable, and is probably due largely to the central situation of the Hospital, and its close proximity to the wharves. In the *Indoor* department, 473 patients have been treated, 250 males and 223 females. Of accidents 52 cases are reported; 6 of these proved fatal, viz., two cases of fracture of the skull, two of fracture of the cervical vertebrae, one of fracture of the leg, one of crushed arm. Of typhoid fever 17 cases are reported, two terminating fatally. The total mortality of all cases treated indoor was 17, or nearly 3.6 per cent.

In the *Outdoor* department, 1078 persons received relief.

The newly established *Eye and Ear* clinic has grown rapidly of late; 407 patients were treated during the past six months.

The Hospital is in a flourishing condition, is deservedly popular, and is evidently doing a good work.

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Original Communications.

A REMARKABLE CASE OF DENTAL TUMOR OF THE LOWER JAW.

Communicated by Dr. C. E. NELSON, New York.

I have much pleasure in laying before the readers of the CANADA MEDICAL RECORD an unusual case of dental tumor completely cured by operation. While it is undoubtedly true that surgery of the jaw follows the ordinary rules and regulations of general surgery, it is nevertheless expedient for a surgeon to avail himself of the advice and assistance of a skilled dental surgeon before undertaking a severe and perhaps useless operation. For the basis of this report, I am indebted to Dr. George P. Miles, of this city, the dental surgeon who operated upon the case. In 1873 a girl aged fifteen sought medical advice for a large tumor of the lower jaw, which had been steadily growing for about six months. For four months the pain had been so severe that morphia had to be continuously administered in gradually increasing doses. A distinguished surgeon who examined the case diagnosed malignant disease, and advised the immediate removal of the tumor along with a considerable portion of the jaw-bone. The day before the proposed operation the patient

consulted Dr. Miles, who after a careful examination came to the conclusion that the tumor was not malignant, but was caused by the presence in the jaw-bone of several of the second teeth which had not yet been evolved. The severe operation previously decided upon was considered unnecessary, and was postponed *sine die*. Dr. Miles freely opened the tumor and let out a quantity of extremely foetid matter, instantly relieving the pain. On passing a probe, it was found that the anterior surface of the bone below the incisors had been absorbed, and that, at the bottom of the cavity so formed, several hard bodies could be felt imbedded in the bone, which were the unevolved second teeth. The cavity was cleaned out and packed with lint soaked in a solution of chloride of zinc. Antiseptic applications were regularly employed, but the wound continued to discharge a thick black and very foetid fluid. By the end of ix weeks, three teeth could be distinguished, viz., the right canine and two right lateral incisors; and at the end of three months Dr. Miles was able to extract these three teeth through the opening made when the tumor was lanced. A year afterwards the cavity had filled up and the jaw returned to its normal shape. The three teeth were arranged horizontally in the cavity one upon the other, and as they were firmly imbedded in the bone, considerable skill was required to dislodge them. The cavity in which they lay was one inch and a half deep, by two and a half inches wide.

Correspondence

THE CLIMATE OF NEW MEXICO.

Editor of CANADA MEDICAL RECORD.

DEAR SIR,—As a resort for consumptive patients New Mexico is now attracting considerable attention in the Eastern States and elsewhere.

It is only since railroad communication has been established—about a year and a half ago—that the attention of the public has been drawn to the advantages offered by the climate of the territory to consumptives, since which time the number of invalides going to the territory has gradually increased.

The climate of the central portion of New Mexico is superior to that of either Colorado or Florida, being more uniform and free from malarial influences. This part, say between the 34th and 36th parallels on the Rio Grande, possesses conditions especially adapted to consumptive patients, viz.: a dry atmosphere and moderate elevation—between 4,000 and 5,000 feet above the level of the sea.

The best proofs of the effects of the climate are the marked improvement in persons affected with phthisis who have visited the territory in the early stages of the disease, and who have resided in the territory a few months, and in the fact that consumption is almost unknown among the native Mexicans, the lower classes of whom are, as a rule, both poorly clad and nourished. These facts have come under my personal observation extending over a term of six years.

Santa Fé should not be recommended, as its elevation—7,000 feet above sea-level—is too great for phthisical subjects. In the southern portion of the territory malaria exists to an alarming extent, and gives rise, very frequently, to a low form of typhoid fever, the mortality from which is very great.

Yours very respectfully,

ROBT. COSTIGAN, M.D.

252 Richmond street.

Montreal, 13th May, 1882.

Progress of Medical Science.

NITRO-GLYCERINE IN TREATMENT OF HEART DISEASE.

By W. E. GREEN, M.R.C.S.

This is a most potent remedy, and I believe I am not overstating its merits when I say that it deserves to rank only second to digitalis in the treatment of disease of the heart. The solution is

the form most generally used, and this is a one-per-cent. solution in spirits of wine: one minim is the usual dose to commence with, but in some cases even less may be given with advantage. It can either be taken in water, or one drop may be placed upon the tongue. The solution is almost tasteless, but within three minutes of being taken it begins to exert its peculiar physiological properties. It paralyses the vaso-motor nerves, and so dilates the blood-vessels: the face flushes, the temples throb, the pulse becomes dicrotic and much quickened; in some cases the head aches most violently, but in others only a sense of fullness and pain across the forehead is experienced which lessens with each recurring dose, until ultimately no unpleasant effect, but simply a warming sensation all over the body, is produced. A feeling of nausea, or even sickness, is often caused by the earlier doses. The quantity may be gradually increased until 15 or 20 minims every four hours are given, but I have never found it necessary to administer such heroic doses. It is never wise to give more than one minim at first, for even this small quantity has produced most serious symptoms in certain individuals. The patient has fainted, and has become almost collapsed, but I am not aware that it has ever been followed by a fatal result. The physiological effect of nitro-glycerine is not so rapidly produced as is that of nitrite of amyl, but it continues from four to six or even eight hours, after which time it is often advisable to repeat it.

I have never found it produce unpleasant effects in any case where its use was plainly indicated; and each day's experience more clearly shows the cases likely to be benefited by it. While useful in almost all cases of heart disease, I believe those in which it will be found of the greatest benefit are, 1st, angina pectoris; and 2nd, weak, dilated, and fatty heart. In angina it prevents an attack by keeping the blood-vessels in a constantly dilated condition, and thus prevents the backward pressure of blood upon the heart, which is probably the cause of the agonising pain of angina. In weak dilated hearts it gives relief by reducing arterial tension and thus lessening the amount of work the heart has to do; the heart, consequently, gains in power by the rest so given to it. As a rule digitalis does not agree in these cases; but, if thought necessary, it may be given with increased advantage in conjunction with this drug. In several cases of dilated heart, with small, weak, quick pulse, I have seen the beats not only increased in power, but much reduced in frequency, after taking nitro-glycerine for a few days, thus plainly showing that the heart had been relieved of much of its embarrassment, and as a consequence had gained in power. I have used this drug largely more than two years, and each week my appreciation of its value as a remedy for this class of cases increases. There are numerous other affections in which it will prove of value, but such do not come within the scope of my present

paper. Bearing in mind its physiological action, it will be easy to select the cases in which its use is indicated.

Mrs. G., æt. 75, thin, spare, suffers from attacks of angina pectoris. March 15, 1880, had a severe attack, for which nitro-glycerine was prescribed, with result of giving almost immediate relief to symptoms and a sound night's rest. Since that time patient has continued to take a mixture containing nitro-glycerine, cinchona and Virginian prune, and there has been an entire immunity from attacks. The mixture is not taken every day, but whenever any premonitory symptoms are felt, and an attack recognized to be imminent, recourse is had to it with immediate advantage. The patient, who before was in a constant suspense and misery, has never since required my professional services, and leads a life of comfort. Dec. 22, 1881,—continues in capital health, takes medicine regularly, and has gained flesh.

Mr. J., E., æt. 70, came under care some two years ago. Patient was a spare man of active but methodical habit, subject to occasional faintings, which evidently arose from the condition of his heart. When I first attended him his pulse, which was full and bounding, appeared to intermit every other beat, but a little care showed me that it was one of those rare cases in which the heart's action was very slow: it was, in fact, only beating 34 per minute. The heart's sounds were in every respect normal, and also the area of dullness. The patient told me that for some years the pulse had gradually become slower, and he had been subject to these fainting attacks, which occurred without any warning. He was recommended to carry nitrite amyl continually with him, in case a fainting attack should occur. About 7 a. m., one cold morning in December, 1879, I was hastily summoned, and found him lying on the floor and perfectly insensible. Nitrite amyl had been administered. I immediately made use of a larger quantity, but with no effect other than to show that he was still living. After this I administered one minim nitro-glycerine in a little water. It had not been swallowed five minutes before the flush returned to the cheeks, consciousness followed, and he began to ask questions. The result of this attack was to greatly strain the mitral valves, and a loud systolic bruit exists to this day. The pulse for some months before was at thirty-two, and since the attack it continues the same, but is much softer in character. There has been only one slight attack of fainting since. The convalescence was tedious, but appeared to be helped by digitaline and nitro-glycerine. General health now appears as good as ever.

Mrs. P., æt. 65, Aug., 1879. Suffering from abdominal dropsy, which appeared to be caused by some portal obstruction. Was also suffering from a pre-systolic mitral murmur, accompanied with almost incessant cough and bronchorrhœa. Heart was much dilated, and pulse rarely less than

120 per minute. The dropsy was gradually overcome by tonics and purgatives, but the patient's condition had not improved much when April, 1880, arrived. Digitalis appeared to disagree in all forms, until the active principle in milligramme doses was given, when improvement became more rapid. Shortly after this time I gave a mixture containing cinchona and half-minim doses nitro-glycerine, after which patient so much improved that she could get down stairs and even out of doors. About the middle of August she caught cold, the result of which was a severe attack of bronchitis. Patient could not lie down in bed, and the cough was most distressing: by the aid of diffusible stimulants this was relieved, but the heart was much weaker, the cough and bronchorrhœa excessive and exhausting. At this time she was taking four milligrammes of digitaline during the 24 hours, one twice during the day, and two at bedtime. One of the granules at bedtime was stopped, and one minim of the 1 per cent. solution of nitro-glycerine substituted with the result of giving her a good night's rest. This dose was continued for some days, and improvement was so great that patient was able to sit up. After a few days the granules were reduced to one each night and morning, and after a month of this treatment I tried the use of nitro-glycerine alone at bedtime, and rather to my surprise found she was considerably better with this remedy, the difficulty of breathing, cough, and bronchorrhœa were greatly improved, and she was soon able to come down stairs. The improvement in the patient's face has been most marked; the eyes, from being always blood shot, are quite clear; lips and cheeks, from a purple tint, have regained their natural hue, the appetite has vastly improved, the bronchorrhœa during the day has entirely ceased, and is considerably better at night. The nitro-glycerine is always taken at bedtime, and is sometimes repeated during the night. The dose, although it has been taken for months, has never been increased. Altogether my patient is in a better condition of health than she has been for the past three or four years.

Bridget D., æt. 11, about November 4, 1880. Has suffered from rheumatic fever twice, and is now in a very debilitated condition. A low mitral systolic murmur exists. Was treated with quinine, iron and digitalis with satisfactory results. Jan. 3, 1881, after playing out of doors in a very bleak wind, she was suddenly seized at bedtime with acute dyspnœa. Dr. Barker saw the patient immediately, and found her suffering from acute congestion of both lungs, rapid breathing, purple lips and pale cheeks; pulse uncountable, and both lungs engorged with blood. Immediately ordered a mustard jacket, &c., saying it was an acute case of double pneumonia, and that she probably would hardly survive the hour, and suggested bleeding. Knowing the debilitated condition of the child, I suggested bleeding the patient into her own blood-vessels by dilating them with nitro-glycerine. We

returned to the case and found patient somewhat better. The jacket had relieved the heart, but it was beating nearly 200 times in the minute, and the lungs were still engorged. One minim of nitro-glycerine was at once given with its usual effect of dilating the blood-vessels and flushing the face, and giving relief to the apoplectic condition of the lungs, with slower action of the heart. An hour afterwards a milligramme of digitaline was given, which still further improved the power of the heart, and the patient gradually recovered. The nitro-glycerine was given every four hours combined with tinct. digitalis, and the patient made a satisfactory recovery.

My opinion of this case was that the cold air contracted the cutaneous blood-vessels, thus rendering the work of the heart laborious, the weak heart failed, and engorgement of both lungs (called in some old medical works penumonic apoplexy) followed as a natural consequence, and would rapidly have proved fatal had not Dr. Barker's mustard jacket supplied a necessary stimulus to the heart, and also to a certain extent relieved the action, by dilating those blood-vessels which were in its immediate vicinity. This was afterwards more effectively and extensively done by means of the nitro-glycerine, and to this and to the increased power given the heart by means of the digitalis I ascribe in a great measure the satisfactory result.

I could relate numerous other cases showing the value of this remedy in heart disease, but the cases cited are sufficient to prove that in this new agent we have a very powerful measure in diseases of the heart. It is a remedy, moreover, which is not only palliative, but in many cases actually curative.—*Practitioner.*

THE TREATMENT OF THE DISEASES OF THE RESPIRATORY SYSTEM.

By E. L. SHURLEY, M.D., Professor of Practice of Medicine in Detroit Medical College.

Croupous Pneumonia.—This disease usually affects one lung, especially the apex of the right. Dryness of the skin and pain in the mammary region are the most prominent symptoms.

Treatment.—General blood-letting, hot poultices and baths are of use. If the patient is healthy, we may prescribe a saline cathartic or calomel and jalap. Don't order this and the hot bath at the same time. To relieve irritation (coughing) we use opium. This will reduce the frequency of the pulse and respiration. Jaborandi, gelsemium, belladonna and aconite are used in the first stage of pneumonia.

Jaborandi does not repress the heart's action. The fluid extract is the best preparation to produce an action on the skin. It is given in doses of 3 ss. to 3 j. every three hours. After the action on the skin we notice its effect on the kidneys or its diuretic effect. Atropia is the direct antagonist of laborand

Belladonna produces contraction of unstripped muscular fibres, i.e., of the heart and arterioles. Never use belladonna in large doses in pneumonia. If the temperature is very high in pneumonia, use belladonna and aconite, especially when a spasmodic cough is present.

Muscarine is the active constituent of mushroom. It is a paralyzant. Vertigo is often produced by this drug. The pupil first contracts and then dilates. Atropia is antagonistic to muscarine. Muscarine should not be used in pneumonia. It is very dangerous.

Gelsemium cannot be depended upon in decreasing the temperature. Paralysis takes place before lowering of the pulse can be produced. It is very unsafe. It produces diplopia—double vision. If this occurs, the administration of the drug must be stopped. The frequency of the heart beat is rather increased. In a case of pneumonia the drug is not to be depended upon. Aconite, tartar emetic and veratrum viride are the best remedies to be used in pneumonia. Aconite is given in small doses, one-fourth of a drop every hour. As soon as a tingling is experienced in the fingers and toes, stop giving the aconite. One-half to one-eighth of a grain of tartar emetic is given every hour until the physiological action is produced. If gastric catarrh exists, ipecacuanha may be substituted.

Digitalis has a direct action on the heart centres.

Second Stage.—Red hepatization. By this time the patient has become run down. Expectoration of a rusty color takes place. If this becomes like prune juice, the prognosis is bad. We may be obliged to use aconite, etc., to depress the circulation. If the disease becomes malarious, quinine or spirits of ammonia are given. Apply hot poultices as in the first stage. Acetate of ammonia with iron is a very good stimulant in these cases. Cinchonidia is more useful in pneumonia than quinine.

If the third stage (gray hepatization) sets in, use stimulants. Blisters for counter irritation do harm in the first stage. In the latter stages, especially in pleuro-pneumonia, they are very useful. Do not depend upon their derivative effect. Abscess of the lungs, chronic pneumonia and tuberculosis may result from pneumonia.

Abscess of the lungs is frequently a complication of pneumonia. It manifests its presence by the physical signs.

Treatment.—Iodide of ammonia is useful. The food should be digestible and nutritious. Crowd the stomach with food. Iron is sometimes good if it does not produce too much constipation. The phosphates are serviceable in these cases. Camomile will often arrest the secretion of the pyogenic membranes. Let the patient remain in the house for a long time. If he goes out into the open air, he should wear a respirator. The patient should not ride or move violently. Iodine by inhalation is also very useful.

Acute Catarrhal Pneumonia (capillary).—This disease affects mostly children and old people.

Symptoms.—A cough, sometimes suffocating in character; crackling sounds on both sides (crepitation) and pleural râles. Beware of suffocation.

Treatment.—The best is tartar emetic.

℞. Antimonii et pot. tart. gr. j.

Aquæ ʒ fl. x. or. xii.

Sig.—One teaspoonful every half hour.

A warm bath every four hours will also do good. If the head be red and the skin dry, tell the parents of the child that convulsions may follow. If an anodyne is required employ chloral and hyoscyamus. Young children are apt to swallow the expectoration. When the stage of expectoration comes on apply poultices. You may give expectorants. In this stage the nurse or parents must raise a child slowly or syncope will follow. One grain of carbonate of ammonia well diluted with water can be given with benefit. Quinine by suppository or injection. For injection the quinine is dissolved in milk. Tell the nurse to hold the nates of the patient closed after the injection has been made. If suffocation comes on, emetics are indicated. Catarrhal pneumonia in old people comes on as an accidental phthisis. It affects the lobules in spots.

Interstitial Pneumonia arises from constant irritation by coal and stone dust, street dust, gas, etc. The first condition is catarrhal, the second phthisis.

Treatment.—Prevent the dust from entering the patient's mouth. Let him wear a respirator, or, if this be too expensive, a sponge. Poultices should be kept on during the whole course of the disease. A bread poultice is made by pouring boiling water on pieces of bread until they become pulpy. The patient can only catch cold when getting better. Carbonate of ammonia is useful, but should not be given too freely. Iodide of ammonia is better for children. Stimulants are indicated. Phthisis does not follow generally except in scrofulous patients. In scrofulous phthisis we give stimulants and tonics, as nux vomica and digitalis. No poultices.

Pleuritis.—There are four forms of pleuritis: acute, chronic, localized and secondary.

Acute.—Pain on the afflicted side.

Treatment.—We must give an analgesic. Give small doses of opium, but enough to quiet the pain. Fever is sometimes present. To rest the lung on the affected side use adhesive bands, applied opposed to the action of the muscles of the ribs or a plaster-paris jacket. The constitutional trouble is best relieved by tartar emetic, ext. jaborandi, fl. tincture of aconite root, or veratrum viride. We may give acetate of potassium or nitrate of potassium, five grains every three hours. In the second stage diuretics and diaphoretics are very serviceable. Withhold water. If this treatment fails, we use the iodides.

℞. Iodinii gr. xx.

Potassi iod. gr. x.

Glycerinæ ʒ i.

At the end of this stage the patient may leave the house and take a walk once in a while if he desires.

Localized pleuritis occurs usually in young men from eighteen to twenty-four years of age.

Symptoms.—There is no pain present. The patient gets out of breath easily.

Treatment.—Do not use depressants. Crowd the stomach with food. Ten grains of iodide of potassium three times a day is useful. Sometimes the addition of acetate of potassium will be very serviceable. If the patient becomes weak, stop this treatment and administer tonics. You may return to the former plan of medication again later.

Empyema, Chronic Pleurisy.—Aspirate the chest. If you find the general condition of the patient good, and if the fluid looks like pus, you may inject carefully.

℞. Iodinii ʒ j.

Aquæ dest. ʒ ij.

If the fluid reappears, draw it off again. The lung should be expanded before the fluid is drawn off. In chronic pleuritis the lung is compressed. The secondary pleuritis is traumatic.

Asthma.—There are three kinds of asthma: spasmodic, peptic and reflex idiosyncratic or hay asthma.

Treatment (in general).—It is not necessary to do much for the patient during the paroxysm. Observe if the patient has goitre, disease of the digestive or nervous system, or some idiosyncrasy. If the asthma is due to contraction of the arterioles, use nitrite of amyl. In the other cases we may try this remedy also. If this fails grindelia robusta, forty minims to the dose, is very good. During the paroxysm lobelia may be given. Bronchial asthma (winter cough) is allayed by anodynes.

Spasmodic asthma is due to direct or reflex contraction of the muscular tissue of the pulmonic apparatus. If the smaller tubes are affected, the disease is more severe. We often have asthma as a complication in acute bronchitis. In this case lobelia, syrup of squills or ipecac, or compound syrup of ipecacuanha, or Dover's powder, followed by anti-spasmodics, elixir val. ammonia with bromide of potassium. Hydrate of chloral is not good. Camphor is useful. Ten to thirty minims of ext. grindeliæ Robusta every two, three or four hours is also very good. Assafoetida is sometimes useful in spasmodic as well as peptic asthma.

Peptic Asthma.—The patient notices that after taking much of a certain kind of food he or she experiences a difficulty in breathing. If this comes on one or two hours after meals, the trouble is in the liver, pancreas or intestines. Sometimes the trouble will come on periodically.

Treatment must continue at least one month. The compound cathartic pill or magnesiae sulphatis will prove valuable in cases of this kind. If the trouble is due to malaria, we give calomel and rhubarb followed by cinchona. A good treatment is to give an emetic or cathartic, followed by some

stomachic sedative or quieter, as one or two minims of dilute hydrocyanic acid, or twenty or thirty grains of sub-nitrate of bismuth. This may be followed by hydrochloric acid. Sometimes constipation exists. To relieve this employ aconite, belladonna and aloes.

℞. Olii tigllii.....gtt. iv.

Muc. acaciæ vel.....

Olii ricini..... ʒj.

Sig.—One-half to one teaspoonful.

Neurotic Spasmodic Asthma (hay asthma, etc).—Overwork is one of the most frequent causes.

Treatment.—Chloral hydrate and bromide of potassium are indicated. If the asthma keeps on, you may use the cold douche or the ether spray.

Valerian and assafoetida. If the circulation is weak we may add hyoscyamus. Instead of giving opium we direct (because we wish to continue) from twenty minims to one drachm of piscidia erythrinæ or Jamaica dogwood, as it is commonly called. Conium is useful. If this will not answer, the patient may burn nitrate of potassium paper and inhale the fumes. He must live quietly. Colorado has the best climate for asthmatic persons.

Cardiac asthma is sometimes due to collapse of the lobules. It is always due to cardiac lesion.

Treatment.—Digitalis is indicated. For gouty patients lithia is the best. Be careful in the use of opium; rather do not use it at all. Chloral hydrate should also be avoided.

Asthma is also often due to diseases of the mediastinum and bronchial glands. It is frequently the result of chronic bronchitis. Give iodine. Sometimes asthma is due to goitre. Push the iodine. Tobacco smoking will sometimes relieve asthma, especially in middle-aged men. Cubeb cigarettes are good. The cure by changing climate is the most effectual.

Gangrene of the lung is in most cases due to thrombus or aneurism. It is generally fatal. Stimulants should be administered constantly. To do away with the bad odor give creosote or carbolic acid.

Carcinoma of the Lung.—There is not much that can be done. The cough is sometimes produced by stomach distention or irregularity of the heart.

Dyspnœa.—Find out the cause and treat accordingly. Sometimes it is due to nervous irritability. If so, thirty or forty minims of cereus grandiflora every four hours is useful.—*Western Medical Reporter*, p. 99.—1881.

FLATULENT COLIC IN AN INFANT, DUE TO INDIGESTION.

GENTLEMEN:—The case before you hardly seems to be an important one. You see a well-developed, vigorous child, of fifteen months, lying quietly on its mother's lap, nursing, the

picture of health and contentment. The mother tells us, however, that every now and then the baby has attacks of severe pain, during which it struggles and screams aloud; she comes here to ascertain the cause of these attacks.

Here we have an apparently healthy child, still nursing at the breast, taken suddenly with abdominal pain, the attacks coming on irregularly. Sometimes a pin in the infant's clothing is responsible for screaming spells; and I would advise you, whenever you find a baby in violent pain, without apparent cause, to look at the pins. In this case we have no occasion to believe that the spells are due to such cause; the mother is very careful, and assures us that this has been attended to; but upon investigating further I find that the question of diet may furnish an explanation of the pain. The baby goes to the table, and is allowed to eat pretty much everything that adults do, and gets also gruel and a good deal of starchy food. It is this feeding in great excess starchy foods to infants that is responsible for the great mortality among the infants in all our large cities. What is the result of giving such improper diet? When a child like this takes an excess of starch into its alimentary canal it undergoes fermentation, liberating large quantities of carbonic acid gas, which, suddenly distending the stomach and bowels, causes pain.

The second case, which I will show you presently, is a little baby far advanced in marasmus; it is five months old. It also lies quietly in its mother's lap, but it has a puny look, and its face wears a characteristic dazed expression, a look that all infants fed with anodynes are accustomed to exhibit. There is a way of relieving these infants without resorting to injurious anodynes. In the first place the diet must be corrected. Here, in the first case, we advise the mother to keep the baby upon its natural aliment; more especially so, because she has an abundant supply, and the child thrives upon it. Should the mother's milk become insufficient, it may be supplemented by cow's milk, a little diluted, and moderately sweetened. The best substitute for cow's milk in large cities is good condensed milk. I have used it extensively and have seen large numbers of infants raised upon it very successfully, and have, therefore, much confidence in it, and recommend its use in cities, especially in the summer. Of course, to those living in the country, who can secure good fresh milk from healthy cows, no substitute is needed. Good fresh milk should be diluted with one-third its bulk of water, and a little sugar added; condensed milk requires five or six times its bulk of water. Such should be the aliment of the child until the teeth make their appearance; nor should the diet be changed until he has sufficient teeth to masticate his food.

A proper regulation of the diet is, therefore, the first step, avoiding those articles of food which the mother considers so harmless, potato, bread, and gruel, which undergo fermentation.

In addition, we shall order a prescription containing a capital remedy for colic in infants, one that is more efficient and less dangerous than the ordinary preparations of opium—bromide of potassium dissolved in aniseed or peppermint water, or the following:—

R. Potassi bromide,	3 j	
Ol. anisi,	Mj	
Mucil. acaciæ,		
Glycerini,	aa	3 ij
Aquæ,		3 ss. M

of which a teaspoonful may be given when the colic comes on. We may order it without fear, knowing that it is perfectly safe, and can do no mischief, which cannot be said of the various soothing combinations and carminatives in common use in the nursery, which usually contain laudanum or morphia. In a former generation it was Godfrey's cordial that was popular; now it is Mrs Winslow's soothing syrup; but the anodyne is the same in a different form.

The second infant, already referred to, is the young mother's first baby; she is not very familiar with the details of infantile life, and must, therefore, learn its management from the friendly old women. Gentlemen, young mothers are the prey of all the old women in the neighborhood; they are showered with advice. Nothing is so grateful as to mount the moral pedestal and dispense beautiful sentiments to all about us.

I called your attention to this dazed, stupid look, and the quiet way the baby lies. Look at its arms and legs, how far gone in emaciation this child is! In pursuing the investigation I find that the mother has an abundance of good milk, and can readily nurse the child. I have often observed that mothers with a blonde complexion and light hair do not have the same amount of milk nor the same ability to nurse their infants as those with dark hair and eyes; the quality of the milk is also better in the brunette. The mother tells us that this has always been a cross baby; it is restless, and cries a good deal. To quiet the infant, she put it frequently to the breast. What was the natural result! Indigestion; colic; soothing syrup. The anodyne served for a time, but did not appease the child. On the advice of the neighbors it was concluded to try gruel, on the supposition that the mother's milk did not agree with the infant. The starchy food fermented readily, and all the time the stomach was also crowded with milk, without allowing any interval of repose. The stomach needs rest, like other organs, and that of infants, like adults, requires to be empty at times. What is the rule for nursing? It is to be determined by the rate of digestion. The digestion of milk is completed in two hours, consequently the newborn infant should be nursed not oftener than every two hours; after six months the interval should be increased to three hours, excepting at night, when a longer time may elapse.

But children cry from other causes than pins or colic; sometimes the baby cries for a drink of water. Instead of putting the child to the breast every time he cries, he should have occasionally a drink of water to cool his mouth. Babies need water. What else? If the mother's milk is sufficient, it should have no other aliment. If necessary to supplement it the best substitute is condensed milk, American or Swiss. The great multiplication of infants' foods proves destructive to many infants in our large cities every year. Infants in this condition of feeble digestion—*apepsie*, as the French call it—are, as a rule, greatly benefited by brandy, and they are about the only specimens of humanity that are. This child should have fifteen drops of the best Cognac every three or four hours, always giving it after aliment, or after nursing. In these cases of *apepsia* in infants, good is also accomplished by pepsin; it is one of the few instances where pepsin is beneficial. Every time it takes its aliment it should also have ten or fifteen grains of saccharated pepsin.

These are the medicinal means required; what are the hygienic ones? The child needs air, and it should be sent out in the open air and sunshine daily. Moreover, the skin should be kept in good condition, by baths, friction, and inunction. After a warm bath, if the skin is well rubbed with a little fat, it will improve the nutrition, and here is a case in which inunction will especially prove of service. After the morning bath the skin may be well rubbed with a soft, dry towel, and then a teaspoonful of lard rubbed in.

With proper attention to the medicinal and hygienic treatment of these cases, with careful regulation of the diet, you will soon see the child flourishing, instead of looking wan and exhausted.—*Phil. College and Clinical Record.*

THE USE OF IODOFORM IN BRITISH HOSPITALS.

(From our London Correspondent.)

This substance is now extensively used in Great Britain. It is chiefly employed as an external application, but is also given internally by a few physicians.

Locally, it is used for soft and hard chancres, syphilitic and other ulcers, cancerous sores, as a dressing for wounds, eczema, impetigo, lupus, laryngeal and pharyngeal affections, mammary and other tumors (to promote absorption), hemorrhoids, onychia, etc.

Internally, it is given mainly for syphilitic affections. Cases of poisoning from its use have been reported from the continent, but none have as yet occurred in Great Britain. No case of iodism has yet been published as resulting from its use.

The methods of employing it by different physicians and surgeons at several of the hospitals are briefly summarized below.

At University College Hospital, Mr. Berkeley Hill uses it a good deal for soft chancres. He recommends that it should be applied in the form of powder twice a day, the sore having been previously washed and dried. Some lint or cotton-wool is then applied, and over this a piece of oil-silk; in some cases, *e.g.*, over external parts such as the groin, Mr. Hill also prescribes an ethereal solution. In either case, he does not advise its use when the sore is inflamed. For hard chancres he recommends powdered iodoform as a local application every six hours, care being taken to keep the sore clean. Mr. B. Hill has also used it internally in cases of syphilis during the last few years. Mr. Godlee employs it for eczema and some cases of lupus. Ten grains of iodoform and a drachm of oil of eucalyptus are made into an ointment with an ounce of vaseline. Dr. Crocker applies it in cases of eczema attended with offensive discharge. He uses it both combined with eucalyptus as above, and also as a simple ointment made up with lard (ten grains to the ounce). He finds the discharge becomes much less offensive under its use.

At King's College Hospital, Mr. Watson Cheyne employs in cases of gonorrhœa soluble bougies containing iodoform and oil of eucalyptus. Mr. Cheyne claims that by this method gonorrhœa may, in many cases, be arrested in the first stage. Mr. Cheney believes in the specific nature of the gonorrhœal discharge, and considers that these bougies act by destroying the germs.

At Charing Cross Hospital it is much used as an application to soft chancres by Mr. J. H. Morgan and Mr. Astley Bloxam. Mr. Morgan believes it to have a detergent action on foul sores, but does not think it has a direct healing action. He informed the writer, however, that he recently had a case in which he removed a cystic tumor from the neck (not antiseptically), and, after washing the wound out with carbolic lotion, scattered some powdered iodoform over its surface. The edges were then drawn together, covered with some more iodoform and then covered up. On removing the dressings in a few days, the wound was found to have healed by first intention. Where the smell is an objection to its use, Mr. Morgan employs it mixed with an equal bulk of tannin.

At the Lock Hospital Mr. Astley Bloxam employs iodoform for both soft and hard chancres. In the latter case he combines its local application with the internal administration of mercury.

At the London Hospital it is used (powdered) as a dressing for wounds. Mr. Rivington employs it for this purpose somewhat extensively. Mr. Reeves frequently uses it as a local application to the ulcers met with in the later stages of syphilis. From the hospital records it appears that about one-third of the cases now under Mr. Reeves are using iodoform in one way or another. As he uses it mainly for syphilis, the great prevalence of the disease at the East End is only too apparent.

At the British Hospital for Diseases of the Skin, Mr. Balmanno Squire prescribes it as a local applica-

tion for the contagious impetigo of young children. He directs that the scabs should be first softened and removed, the surface gently dried, finely powdered iodoform (diluted with starch if necessary) dusted over the surface, and lastly a thin layer of glycerine painted on. This should be done every two hours. Mr. Squire has found this induce a marked improvement within even a few days, the discharge quickly changing its character from purulent to serous.

At the Hospital for Diseases of the Throat, iodoform is a favorite remedy. Some time since it was (dissolved in ether) freely used as a spray in ozæna, and other nasal cases. Some of the staff here also mix it with other substances, to apply to the interior of the larynx by insufflation. In the Pharmacopœia of this hospital there is a formula, introduced by Dr. Whistler, for pastilles of iodoform, each containing one grain with a basis of glycerine and gelatine. These are much used in syphilitic eruptions of the mouth, tongue, and throat. There is also a form for nasal bougies, each containing half a grain, and an "insufflation" for ear cases, introduced by Dr. Woakes. It is, perhaps, most extensively used at this hospital by Dr. Prosser James, he having been the first to recommend it as a local application in diseases of the throat and nose, also as an internal remedy in syphilis and some other diseases. He applies it either pure or diluted according to circumstances, with an indifferent powder, such as starch or lycopodium, to syphilitic ulcers in the mouth and pharynx; and also, by means of a proper insufflator, to ulceration in the larynx, either syphilitic or tubercular. In the latter case, mostly mixed with a small quantity of morphia, and diluted with an equal part or more of starch. In the pharynx, he generally employs it pure. Some time ago he used it freely in a case of cancer of the tonsils, and it seemed at first to afford considerable relief, but after a while lost its power. In another case of cancer extending on to the tongue, it produced so much pain, even when mixed with morphia, that it was discontinued. In all these cases Dr. James insists on the necessity of reducing the iodoform to the finest powder. Internally, Dr. James has used it for many years—indeed from its first introduction. He gave it in one-grain pills, commencing with three daily, and gradually increasing to nine a day, or more. Of late years, he uses two-grain pills, and increases the number gradually, as in the former case. In the hospital Pharmacopœia these pills are made with one grain of sugar of milk and sufficient glycerine of tragacanth to make a pill of proper consistence. Dr. James remarked one day at his clinic that, in private practice, the smell of the substance being a disadvantage, he conceals it by mixing the iodoform with equal weights of balsam of Peru and liquorice powder. This forms a good firm pill, without further excipient. He gives it thus internally in tertiary syphilis as it rapidly arrests ulceration, and contrary to what is stated in a recent text-book, it is *not* so likely as potassium

iodide to produce iodism, and he has never known it do so, although he has continued the pills for months together. He also uses the drug internally for chronic glandular enlargements and other strumous manifestations; also in lupus and lupoid affections.

At Edinburgh, iodoform is used largely in the Royal Infirmary, and with very good results. Mr. Chiene uses it in his wards for nearly all forms of sores, more especially for specific sores, syphilitic and strumous ulcers. The part is either dusted with the powder, or else the iodoform is made into an ointment and thus applied. Mr. Chiene sometimes applies a charcoal poultice, to deodorize the surface before applying the iodoform. He employs it in this way in large syphilitic ulcers and gumma, thus bringing the part into a healthy condition. It is also used in cutaneous diseases.

Dr. T. R. Fraser, the Professor of Materia Medica in the University, recommends it in his lectures as a local anæsthetic and antiseptic in cutaneous diseases, syphilitic ulcerations, enlarged joints, and also glandular enlargements. He also recommends it in the form of a suppository (each containing seven grains), in fissure or irritation of the anus, and in hemorrhoids. For an ointment he advises one to one and one-half drachm of iodoform to an ounce of simple ointment. Dr. Fraser believes that iodoform possesses all the advantages of iodine, without the local irritating properties of the latter.

In the maternity department of the Royal Infirmary, Dr. A. G. Miller uses it for soft chancrous sores in women, in the following method: Some powdered iodoform is placed in a small muslin bag, and given to the patient, who is directed to apply it herself to the affected part. Dr. Miller uses it extensively in these cases.—*N. Y. Medical Record.*

THE TREATMENT OF PNEUMONIA AT BELLEVUE.

The motive of the general treatment of pneumonia at Bellevue Hospital is to sustain the powers and stimulate the functions of the patient till the comparatively brief and self-limited disease shall have spent itself.

The pulse is taken, rather than the temperature, as the gauge which best indicates the capacity for resistance, and an increase in its rapidity and diminution in its force are understood as a call for stimulants. Forms of stimulation used are to some extent subject to differences of opinion on the part of the visiting physicians, but all are agreed as to the value of whiskey, and there is almost as much unanimity in their regard for the carbonate of ammonium. Digitalis is much used, but it is objected to by some, partly because experience seems to indicate that in some cases, when the crisis of the disease has passed, patients are left, after its use, in a condition less favorable for

recovery, and partly from the theoretical consideration that this drug is not general enough in its action. Camphor has been employed by some as a diffusible stimulant.

The general treatment of pneumonia is, then, by simple stimulation. In special conditions, however, more is done. When the patient is first seen, if he is suffering from considerable pain, a few doses of morphia are recommended. If the disease is seen at its outset, and if the outset is violent in character, one at least of the leading physicians on the visiting staff believes in the good effect of a few doses of aconite, but its use is not general in the hospital. The spirit of mindererus, sweet spirit of nitre, calomel, and Dover's powder, are used by some in the first stage of the disease. Quinine is occasionally called for to bring down the temperature when it rises to a certain height. One of the visiting physicians makes a special point of the importance of watching the kidneys and seeing that they perform their duty well.

The appearance of œdema of the lungs finds agreed upon the necessity of pushing the stimulants. But beyond this there are some differences of practice. They would be included in the use of dry cups, the hot pack, oxygen, and, in the few cases which are entirely suitable for it, bleeding.—*Med. Record.*

TREATMENT OF NASAL CATARRH.

By PROF. A. W. CALHOUN, of Atlanta Medical College (*Class of 1869*).

The case presented itself at the clinic December 1st, with nasal catarrh of two years' standing. The discharge was thick, yellow, occasionally mixed with blood and scabs, and excoriated the nostrils. He was directed to cleanse the nostrils thoroughly with warm salt water twice daily, using both the anterior and posterior nasal douche, and immediately afterward the following, used in the same way:—

℞. Ammonii chloridi, ʒ iv
Aqua, Oj. M.

Sig.—Tablespoonful to douche.

When the nostrils become accustomed to this, use a chlorate of potash sol. of the same strength: then after a time stop these and alternate between the two following prescriptions:—

℞. Glycerini, ʒ ij
Acidi tannici—add as long as it will dissolve.

℞. Cupri sulphatis,
Ferri sulphatis, aa ʒ j
Aqua, ʒ ij. M.

Ft. sol.

Sig.—Begin (with each of the above) with 5 to 10 drops to each doucheful of warm water, and gradually increase strength as high as patient can tolerate.

After alternating between the last two for a time, he may use the following :—

R. Iodoform, pulv.,	3 j
Extract. geranii.,	gr. x
Acid. carbolic.,	gtt. xv
Vaseline,	3 j. M.
Ft. unguentum.	

Sig.—Saturate absorbent cotton with it and apply up the nostril at night.

—*Atlanta Medical Register, Feb., 1882.*

PURPURA SIMPLEX—HYPERIDROSIS OF THE FEET, PSORIASIS, SCABIES, ECZEMA OF THE ANUS.

By LOUIS A. DUHRING, M.D., Professor of Diseases of the Skin, University Hospital.

A man about thirty-five years old states that he never had any skin disease until the present one made its appearance, which happened about four years ago. The eruption since that time, according to his statement, has disappeared and reappeared, being better and worse from time to time, and better in summer than in winter.

The lesions are in the form of an efflorescence occurring symmetrically, and spread over the backs of the feet, the legs and the posterior surfaces of the thighs, even extending back upon the buttocks, which is unusual. They consist of variously sized patches, discrete and confluent, of a dusky brown color where the patches are old, but where they are more recent, of a reddish hue. In form, some of the lesions are round and oval, but for the most part they are irregularly shaped, and are sharply defined.

What is peculiar, and especially characteristic, is that the eruption does not disappear on pressure. The lesions on the feet and some on the thighs seem, from their bright red color, to be quite recent. About the ankle the epidermis is roughened and is somewhat exfoliated.

It is very evident that we have here to deal with a hemorrhage, which is situated in the corium. The spots are all on a level with the healthy skin, and are not perceived by the touch. The diagnosis is simple; yet such a case may be perplexing, for the lesions are situated somewhat peculiarly, some being found upon the buttocks. The appearance on the thigh is very striking and quite unusual. The lesions, which are bright red, are due to recent extravasation, and are arranged in lines, which is the result of scratching, for the disease is sometimes accompanied by itching.

The process of recovery is slow, and where the blood thus extravasates into the surrounding tissue it is slow in being absorbed, and the deposit undergoes many changes which gives rise to variation of color.

The treatment of the disease should be carried on with discretion, and as the present patient is a laborer, and obliged to work hard, it will be neces-

sary first to order a nutritious diet, and then administer tonics to build up a broken-down system. We have some remedies which act on the disease; one of the most successful of these is ergot. I will therefore order the patient to take half a teaspoonful of the fluid extract of ergot, properly diluted, three times a day. This remedy usually acts promptly, and we may expect to see improvement in a week's time. Our prognosis is favorable, although relapses may occur.

Hyperidrosis of the feet.—A boy about twelve years of age comes to us for advice respecting a very troublesome disorder. He states that it has now existed for about four months, during which time, whenever he ran about or exerted himself in any way, the flow of sweat would be so abundant about his feet as to require him to change his stockings frequently, also making his feet so tender that he was unable to stand upon them. The cause of this is obvious; the skin being kept wet, the epidermis became soaked and macerating, peeled off, leaving the tender structures of the skin exposed.

Hyperidrosis of the soles is a common affection, but the treatment is often difficult. We should therefore never be too confident about the success of any one remedy, as it is often annoying to find out that the expected relief does not come. The prognosis should also be guarded, as the disease is often very obstinate.

The treatment in this case will consist in the local application of lotions, which, I think, yield more satisfaction than ointments. One of our very best remedies is belladonna in the form of the tincture. It should not be used too strong at first, and in this case I will advise one teaspoonful in one ounce of water, increasing to full strength.

Psoriasis.—A man forty-two years old, a native of England, and a blacksmith by occupation. He states that he was frequently troubled with dyspepsia, but the bowels were always regular, and that he never had any eruption of the skin until about a year ago, when the present skin disease made its appearance. It first manifested itself upon the soles of the feet, beginning with burning and itching. It spread over the entire soles of his feet, and between the toes. The feet soon began to swell considerably, the burning and itching still continuing, and the toe-nails fell off. In a week after the disease appeared upon the feet, lesions came out upon the palms of the hands. These also soon became swollen and inflamed. A little later a patch came out on the forehead, and the scalp soon after became involved, and within three weeks patches began to appear on the body and limbs. He states that of late he has had chills and sweats, and also appears to be losing flesh.

The lesions are, as you see, characterized by a marked inflammation, extending over the lower extremities, upon the trunk, and upon the forearms and hands. The hands are deeply fissured and covered with whitish and yellowish scales,

which are constantly being shed. Coming up to the forearm, the lesions are more discrete, about the size of a split pea, slightly elevated, and covered with abundant yellowish lamellated scales, which can be picked off. Beneath the scales the skin is highly inflamed. The scales are peculiar to this disease, and on the trunk, where the lesions are more discrete, and thus more recent, they are especially characteristic. The lesions on the trunk, as usual, are much paler than those upon the hand. On the right side of the chest is seen a typical eruption of psoriasis, consisting of slightly elevated split-pea-sized confluent spots, covered with silvery scales. The lower extremities are affected just as the upper, and present the same peculiarities. The nails are markedly affected.

The diagnosis is easy. In the treatment the first thing is to employ measures to free the skin from the scales which collect more or less rapidly upon the surface. I would therefore advise the patient to take a bath every day, remaining in the bath half an hour, and rubbing the parts well with *sapo viridis*, after which to anoint the affected parts freely with olive oil. Internally, I will prescribe the following, which sometimes proves valuable in cases such as the present—

R. Liq. potassæ..... f ʒ ss.

Sig.—Ten drops, freely diluted, after each meal.

The prognosis should be guarded. It usually requires months to effect a complete cure, and relapses are very liable to occur.

Scabies.—A boy twelve years of age presents a papular and vesico-papular eruption over the anterior surface of the trunk, shoulders, arms, forearms, hands, and also on the thighs and penis. About the hands it consists of pustules and vesico-pustules, and there are also some excoriations and fissures. The disease has existed about one month and is a clear case of scabies. Carefully examining the parts around the knuckles of the hand, small burrows may be seen, which are eminently characteristic. If, however, the lesions are not recent, these burrows are for the most part destroyed by scratching. The distribution of the eruption is also very characteristic, it beginning usually upon the fingers where they are joined to the hand, about the penis and buttocks, then extending in all directions. The appearance of crusts, fissures, excoriations, etc., are also secondary, and are due to scratching on the part of the patient. The subjective symptom is mainly itching, which is constant and annoying.

Scabies is a highly contagious parasitic disease, due to the presence of the *sarcoptes scabiei*, and, if recognized, the treatment is highly satisfactory. The treatment is simple, and entirely local. I would recommend sulphur in the form of an ointment, not the official sulphur ointment, but one which is weaker, as the following :

R. Sulphuris præcipitati..... ʒ j.

Adipis..... ʒ j. M.
Ft. unguentum.

Sig.—Apply morning and night thoroughly.

The patient will also be advised to bathe frequently, and to use soft soap ; not more than six applications will be necessary. If the secondary lesions be extensive, they will require longer and different treatment, in the form of a milder ointment.

Eczema of the Anus.—A man sixty years of age presents, as you see, a very angry-looking lesion about the anus. The parts exhibit a raw surface, much inflamed and thickened, of a bright red color, and covered with some fluid exudation. External hemorrhoids are also present. The subjective symptoms are almost constant and exceedingly annoying, such as burning and itching. They are worse at night, and often so severe as to keep the patient awake. This patient states that he has been kept awake for several nights in succession, and that his general health is being undermined. As for treatment, I would first direct the part to be treated with black wash diluted one-half, after which zinc ointment, which should be kept up for three or four days. Later, a tarry ointment may be ordered.

As the bowels are constipated, I would first prescribe some saline cathartic, such, for example, as magnesium sulphate, ʒ iss.; bitartrate of potassium, gr. xx., in a tumblerful of water, before breakfast. The bowels should be kept on the verge of purgation for a week, after which arsenious acid, grain one-thirtieth ; reduced iron, grain one ; will be prescribed.—*The American Specialist*.

CAPILLARY BRONCHITIS—ITS TREATMENT.

By DEERING J. ROBERTS, M.D., Professor of Theory and Practice of Medicine and Clinical Medicine in the Medical Department of University of Tenn.

Regarding this disease as an essential pyrexial condition, general in character, as denoted by its bilateral action, I place principal stress upon remedies directed to the general system. First, as regards expectorants, I regard them as entirely futile. I do not wish to promote secretion of bronchial mucus, for its excess is the *choke-damp* which most apt to kill my patient. And I know of no remedies that will give a child the power to cough, that has not previously exercised and made frequent use of this safety-valve action of nature. On the other hand, I hold in reserve, as a general would his most reliable troops, certain emetic remedies for use when occasion requires. By emeses, we can accomplish in the child what the adult does by coughing. We can clear the lungs, blow out the flues. Yet we cannot resort to their action continuously, for our patient would soon be in the fix of the Dutchman's horse, who learned to live "mitout food only to die mit ter veakness." As I have said, I hold them in reserve, and only use them when imperative necessity demands. In my choice of emetics, I have a material preference. Antimony is dangerous on account of its depress-

ing effect; so of ipecac and all others of that class that are known as depressants, ipecac being the least so. What I desire is a prompt and vigorous emesis with as little of the depressing effect as possible. For this purpose I prefer Turpeth mineral—Hydrarg. Sulphas Flavus, doses of $2\frac{1}{2}$ to 3 or 5 grains, repeated every twenty minutes until active emesis results. I rarely resort to the use of the emetic oftener than once in twelve hours, and never more frequently than every six hours. Endeavoring to get along with just as few vomitings as possible. In some few cases I use it early, in some only until late, and in others never. I only use it "pro re nata." Next in point of excellence, as a prompt non-depressing emetic, I rank the sulphate of zinc. So far as general remedies are concerned, I generally commence the treatment of a case by the administration of one gr. of calomel divided into four powders, and combine it with white sugar or sub-carbonate of soda, if convenient; or give it floating on a teaspoonful of water. I prefer to give the calomel in the afternoon at intervals of two hours. I repeat it for two, three or more consecutive days if I think necessary to produce a slightly increased action of the general glandular secretory system. As to how small doses of mercury manage this I cannot tell, but that it does accomplish this peculiar work, which I have never found any other remedy perform half as well, is my firm belief. I never want to produce the specific effect of the drug.

Next, I commence the use of quinia in full antiperiodic and antipyretic doses, giving to a child of two years old as much as 10 or 12 grs. of the sulphate between the hours of 6 p. m. and 6 a. m., giving during at least two consecutive nights, and only in the night. Preferring to divide the full amount into equal doses to be given every three hours. In some cases I have given the full amount in only three doses, but I prefer, and think it acts better, every three hours. I rarely continue the use of the quinia longer than two consecutive nights, although in some cases I have continued it every night for more than a week.

After the second or third day, rarely sooner, I act upon Austin Flint's brief suggestion and give full doses of iodide of potash. To a child of two years of age I give as much as $2\frac{1}{2}$ grains, and repeat it every three hours. I usually dissolve it in a small amount of water, and then add to it a large amount of some syrup, preferring the syrup of quince seeds. My usual formula in this case will be as follows:

R. Iodid. potas.....gr. xx.
Aq. dest.....f. 3 ij.
Syr. cydonii.....f. 3 vj. Ms.

S.—Teaspoonful every three hours.

I believe the iodide acts in a peculiar and specific manner, by promoting the re-absorption of the effused mucus. At any rate, after trying it in many serious cases during the last six years, I

have come to regard it as of more effect than all the expectorants from Dan to Bersheba. While giving it I see to it that the child has a full supply of water. If not much at a time, then the more frequent a repetition is seen to. If I cannot prevail upon it to take a sufficient amount of fluid, I try to supplement the amount taken by frequent sponging of the body, or immersing it in an occasional tepid bath.

Venesection I am afraid of. I have never been called to a case early enough to justify the loss of blood—though I claim to carry a lancet and to use it in such cases as would be benefited thereby. I doubt if a case of capillary bronchitis is ever diagnosed early enough to justify its use or that of its subordinate, the leech or wet cup.

Counter-irritation I regard as of prime importance. The method I prefer is as follows: Have a boarding-house batter-cake, or batter-cake, as tough as leather, made. This I immerse in hot cider-vinegar and sprinkle with finely powdered mustard, out of a perforated box; I just want a minute fleck of mustard scattered all over the pancake at intervals of about one-sixteenth of an inch—apply the batter-cake, having it made just thick enough to hold well together and large enough to cover the entire anterior and both lateral surface of the chest; holding it in place by broad flannel roller. In 25 or 30 minutes I remove it, having a companion piece, ready and hot, to take its place. After two or three repetitions I find the surface covered with minute points of redness produced by the mustard, then I continue assiduously the batter cakes hot out of the vinegar but minus the mustard until the redness fades; restoring the redness from time to time as occasion requires. But when I once commence the use of these warm applications, with or without the rubefacient, I continue them until convalescence is fully established.

I use opiates with the same care that I would enter a powder magazine with a lighted torch.

As for diet—well, plain and simple, light and nourishing. I never worry about that much although I maintain enough supervision over the child's food supply to see that it does not suffer for want of food, nor impede the diaphragm by an overloaded stomach.

As regards the use of alkaline salts, I have not found them of any material benefit; and as for the various fever mixtures, the neutral salts, acetate of ammonia, spirits of nitre, etc., I find I get along fully as well without them. The bromides I occasionally combine with the iodide of potash if undue wakefulness or cerebral complications are manifested.

My reliance being upon the alterative action of mercury; the antipyretic powers of quinia; the specific effect of iodide of potash; the revulsive and emollient influence of the external application suggested; and the timely aid of a prompt, non-depressing emetic when needed.—*The Southern Practitioner.*

Extract from a poem read by Dr. Oliver Wendell Holmes, June 8, 1881, at the Centennial Meeting, Massachusetts Medical Society (*Boston Med. and Surg. Journal*):

Hour after hour the busy day has found
The good physician on his lonely round;
Mansion and hovel, low and lofty door,
He knows his journeys every path explore,
Where the cold blast, has struck with deadly chill
The sturdy dweller on the storm-swept hill,
Where by the stagnant marsh the sickening gale
Has blanched the poisoned tenants of the vale,
Where crushed and maimed the bleeding victim lies,
Where madness raves, where melancholy sighs,
And where the solemn whisper tells too plain
That all his science, all his art, were vain.

How sweet his fireside when the day is done
And cares have vanished with the setting sun!
Evening at last its hour of respite brings,
And on his couch his weary length he flings.
Soft be thy pillow, servant of mankind,
Lulled by an opiate Art could never find;
Sweet be thy slumber,—thou has earned it well,—
Pleasant thy dreams! Clang! goes the midnight bell!

Darkness and storm! the home is far away
That waits his coming ere the break of day!
The snow-clad pines their wintery plumage toss,—
Doubtful the frozen stream his road must cross;
Deep lie the drifts, the slanted heaps have shut
The hardy woodman in his mountain hut,—
Why should thy softer frame the tempest brave?
Hast thou no life, no health, to lose or save?
Look! read the answer in his patient eyes,—
For him no other voice when suffering cries;
Deaf to the gale that all around him blows,
A feeble whisper calls him,—and he goes.

Or seek the crowded city—summer's heat
Glares burning, blinding, in the narrow street,
Still, noisome, deadly, sleeps the envenomed air,
Unstirred the yellow flag that says, "Beware!"
Tempt not thy fate,—one little moment's breath
Bears on its viewless wings the seeds of death;
Thou at whose door the gilded chariots stand,
Whose dear-bought skill unclasps the miser's hand,
Turn from thy fatal quest, nor cast away
That life so precious; let a meaner prey
Feed the destroyer's hunger; live to bless
Those happier homes that need thy care no less!

Smiling he listens; has he then a charm
Whose magic virtues peril can disarm?
No safeguard his; no amulet he wears,
Too well he knows that Nature never spares
Her truest servant, powerless to defend
From her own weapons her unshrinking friend.
He dares the fate the bravest well might shun,
Nor asks reward save only Heaven's "Well done!"

Such are the toils, the perils that he knows,
Days without rest and nights without repose,
Yet all unheeded for the love he bears
His art, his kind, whose every grief he shares.

TANNIN IN NASAL POLYPUS.

M. Stanislas Martin states that in six cases he has known injections of officinal tannin, one part to ten of distilled water, morning and evening, prove very efficacious in mucous nasal polypi. If it be continued for some time a tannate will be formed, which will become detached restoring respiration by the nostrils.—*Bull. de Thérap.; Med. Times and Gazette.*

TREATMENT OF HYDROCELE AND SEROUS CYSTS IN GENERAL BY THE INJECTION OF CARBOLIC ACID.

Dr. Lewis states that he has been experimenting, with a view of determining what substance may best secure the obliteration of the secreting surface and the adhesion of the walls of the cyst with the most certainty and the greatest freedom from suffering and danger.

Having selected carbolic acid as an agent which would provoke simply a plastic inflammation, he injected one drachm of the deliquesced crystals into the sac of a large hydrocele. The new procedure was entirely painless.

A sense of numbness alone was experienced, and no inconvenience was felt until, on the next day, the desired inflammatory process was developed. A nine years hospital and private experience leads the author to believe that this method is the most satisfactory for the object. For the purpose of injection crystallized carbolic acid is maintained in a liquefied state by a five or ten per cent. solution of either water or glycerine; the crystals are to be reduced to the fluid state with no more dilution than may be necessary for this. After the usual tapping, he injects the liquefied crystals with a syringe having a nozzle sufficiently slender and long enough to reach entirely through the canula. He has never been able to detect any general toxic effects upon the system, but believes that the action of strong carbolic acid on surfaces secreting albuminous fluids is to seal them, to shut them off from the system in such a manner that absorption cannot readily take place. The occluding influence of strong carbolic acid he regards as an important surgical resource in certain cases of compound fracture, destructively lacerated wounds, and ulcerating surfaces, where septic infection is inevitable.

All forms of serous cysts which are usually subjected to any form of operative treatment, on the principle of producing plastic adhesion of their walls, may be deemed amenable to the treatment indicated.—*Medical Record*, January, 1882.

TREATMENT OF TONSILITIS AND HYPERTROPHY OF THE TONSILS BY BICARBONATE OF SODA.

Dr. Armangué reports in *Revue de Thérapeutique* seven cases of tonsillitis cured in less than twenty-four hours by the carbonate of soda. This method of treatment was introduced by Dr. Ginté, Professor of Clinical Surgery, who employed bicarbonate of soda locally by either insufflation, or directly applied by the finger of the patient. The applications should be frequently repeated until the disease disappears. Dr. Ginté relates dozens of cases in which a cure was accomplished in less than twenty-four hours and has never seen this method fail to produce agodo

effect. The alleviation is almost always immediate, and is never long delayed. Its efficacy is especially marked in the prodromic period of tonsillitis, when it will invariably abort the disease. According to Dr. Ginté bicarbonate of soda does not diminish the predisposition to anginas, but only arrests their development. Excision of the tonsils is a useless operation in cases of hypertrophy of the tonsils, since the hypertrophy can be rapidly removed by frequent applications of the salt of soda.—*L'Union Med. du Canada; Med. News.*

THE TREATMENT OF EPIDIDYMITIS.

Service of Dr. R. F. Wier, *New York Hospital*. No remedies for internal administration are mentioned. The local treatment consists in the application of an ointment composed of xxx grains of iodoform to the oz. of glycerine, combined with this may be added 1 drachm of balsam Peru to control the disagreeable odor of the iodoform.

This form of treatment gives very good results. A second plan is to apply a bag of ice to the part. If this causes pain of the genitocrural nerve, or of the scrotum, a few layers of woollen cloth may be applied between it and the part. If it will do any good, it will be during the first twenty-four hours. If it does not relieve the pain in that time, other treatment should be resorted to.

An old method of treatment was to make a poultice of tobacco and linseed meal and apply to the part. This will relieve the pain. Morphia may be substituted for the tobacco.

Strapping of the scrotum has been suggested in this disease. But compression will do little good, as it will take a long time anyway to get rid of the swelling.—*N.Y. Med. Gazette*, January, 1882.

MILK DIET IN BRIGHT'S DISEASE.

Since we know not at present any drug that possesses therapeutic value to any marked extent in this terrible and fatal disease, and since it is daily making sad havoc among human beings, and principally among that class who, by reason of their valuable public labors, are particularly necessary to the welfare of the world; therefore, it becomes a medical question of paramount interest, that we should discover some potent method of combating this very prevalent disease. Some years since, Carel first called attention to the treatment of Bright's disease by the use of a milk diet, and since then Duncan, as well as many other prominent physicians, have written on this subject. We have ourselves seen some remarkable results follow this treatment, while Dr. S. Weir Mitchell, of our city, is now quite an enthusiast on this subject. This method of treating a formidable disease has received sufficient distinguished endorsement to recommend it seriously to our notice. We would, therefore, ask all physicians

who read this article to try this method of treatment, to furnish us with their experience, which we will publish. The milk is used thoroughly skimmed, and entirely freed from butter. To procure the best results, it has been advised that the patient shall restrict himself absolutely to milk, and continue the treatment for a long time. If it disagrees with the stomach (as it will in some cases), Dr. Mitchell advises that the patient be put to bed, and the treatment commenced with tablespoonful doses, to which lime water is added, until the stomach tolerates the milk, when from 8 to 10 pints daily should be taken, and absolutely nothing else. The sanction of such a distinguished physician as Dr. Mitchell forces us to seriously consider the merits of this treatment, and we trust to receive the experience of all readers of this journal who may have cases of Bright's disease to treat.—*Med. and Surg. Reporter*, January 28, 1882.

VOMITING OF PREGNANCY.

At a recent meeting of the Obstetrical Society of Boston (*Boston Medical and Surgical Journal*), this interesting subject was under discussion. Dr. Fifield said that for years he had succeeded in controlling the vomiting of pregnancy, either with bromide of potassium or rectal injections of one-half drachm of chloral hydrate. But recently he had a case under observation in which these measures, as well as others tried, utterly failed to give relief; the trouble growing daily worse, until the woman vomited blood. He then introduced Sims' speculum, drew down the cervix, which was found a little excoriated, and covered it thoroughly with nitrate of silver. Bromide of potassium was then given in ten grain doses every two hours. The next day the patient was well. It was the sense of the Society that the vomiting of pregnancy is due to reflex action.

Chloral enemata in vomiting of pregnancy are claimed by Dr. Vidal, of the St. Louis Hospital, Paris (*Paris Medical*, November 12, 1881), to yield good results. Fifteen grains of chloral hydrate are given by enemata twice daily, an hour before meals, in half a pint of infusion of orange leaves. Dr. Dussaud, of Marseilles, claims similar good results from a like course of treatment.

REMEDY FOR CORNS.

Mr. Gezow, an apothecary of Russia, recommends the following, in the *Pharmaceutische Zeitung*, as a "sure" remedy for corns, stating that it proves effective within a short time, and without causing any pain: Salicylic acid, 30 parts; extract of cannabis indica, 5 parts; collodion, 240 parts. To be applied by means of a camel-hair pencil.—*Med. and Surg. Reporter*.

STORIES OF DR. NELATON.

The *XXe Siècle* relates of Dr. Nelaton that he was accustomed to say: "If you have the misfortune to cut a carotid when performing an operation, remember it takes two minutes for syncope to supervene, and as many more before death occurs. Now, four minutes are four times the time required for a ligature, provided you don't hurry yourself. Never hurry yourself."

The *Temps* says: "It is related that, when he began his studies, he worked with such ardor that he often refused himself the time necessary for sleep. He procured a plank some five or six feet long and forty centimeters broad, the extremities of which he placed on two chairs. He lay upon it, holding his book open above him. It is said in this position the need of sleep is less readily felt. When, despite him, his eyes closed and the book fell, the shock disturbed his balance, and he followed the book. The shock aroused him, and he got up and began his work again."

DR. CHEYNE AND BEAU NASH.

When Cheyne asked Beau Nash if he had followed his prescription, his witty patient replied, "No, indeed, doctor, for if so I would have been dead." "How so?" asked the doctor, aghast. "Because," said Nash, "I threw it out of the window."

As a hair tonic Dr. Leonard recommends the following:—

℞ Tr. cantharidis..... ʒ ss.
Tr. capsici..... ʒ ss (j).
Ol. cocoæ,
Ol. ricini.....aa ʒ i.
Spt. myristicæ,
Aq. Cologniensis.....q. s. ad ʒ iv. M.
Sig. Shake well. Apply once or twice daily.

TO PREVENT PITTING IN SMALL-POX.

Geo. Carrick recommends the application of rubber in chloroform, as first suggested by Dr. Smarth, of Edinburgh, in 1863. A four-ounce vial half full of chloroform is to be filled three-quarters full with small pieces of pure rubber. It should be shaken every hour until the rubber is dissolved, making a thick liquid of about the consistency of molasses. The face must be painted with solution, beginning as soon as the eruption appears, and repeating it from three to five times a day. In any case where the rubber coating gives way, and pus exudes, the application must be renewed at once. As the chloroform evaporates very speedily, a thin film of pure rubber remains upon the surface, and protects it from the action of the air. The application must be kept up until the crusts begin to loosen upon other parts of the body.—*Translated from Vratsh, in Phys. and Surg.*, July, 1881.

CHRONIC TONSILLITIS.

Davis A. Hogue, M.D., Houtzdale, Pa., writes: I have successfully treated several children where excision was impossible, by the use of a prescription from the clinic of the late lamented Prof. James Aitken Meigs, viz: ℞.—Chromic acid, 20 grains; aquæ, 1 ounce. M. Sig.—Apply to the tonsils by means of a camel's hair pencil. I have found it successful even when the thickening was very great.—*Med. Brief.*

IMPOTENCY.

I am charmed with the effects of celerina (Richardson, St. Louis) in nervous and sexual debility. It is simply the most efficient nerve tonic in the materia medica. I have treated several cases of impotency, that had sorely tried my patience, with complete success under the use of celerina, in teaspoonful doses, four times a day.

I can say from experience, that the following combination will give perfect satisfaction in the treatment of nocturnal emissions:

℞. Celerina..... 8 oz.
Bromidia..... 1 oz.

M. Sig.: One teaspoonful three times a day in water or syrup.

This will stop the emissions, strengthen the sexual organs, and build up the nervous system at the same time.—Geo. Weaver, M.D., in the *Brief*.

TONSILLITIS.—DEMULCENT DRINKS.

The following nutritious demulcent drinks are very grateful: Mix together half a pint of mucilago acaia, misturæ amygdalæ and pure milk; sweeten with sugar, candy or honey, and add one large tablespoonful of any wine. Allow the whole to be taken during the day. Or a large pinch of isinglass may be boiled with a tumblerful of milk, half a dozen bruised almonds and two or three lumps of sugar, and taken warm once or twice during the day.—*Med. Gazette.*

CHLORAL IN LABOR.

Dr. Kane says that chloral may be employed in normal labor for the purpose of blunting sensibility, quieting nervous and hysterical manifestations, shortening labor, and destroying pains. In complicated labor it has three uses—i. e. to relieve pain, to hasten dilatation of the os, and to increase the force of the uterine contractions. Chloral, even when pushed to anesthesia, does not destroy the force of the uterine contractions. The alleged danger of postpartum hemorrhage has no foundation in fact. In moderate doses it is never dangerous. The slight delirium that sometimes occurs is ordinarily removed by a second dose and need cause no alarm. It is rarely necessary to use more than one dram in any one confinement. It is best given by the rectum, in the form of enemata or suppositories.—*Saint Louis Courier of Medicine.*

WHY WE COUGH AND HOW WE COUGH.

Everybody coughs sometimes, and, judging by the quantity of patent cough medicines sold, many people must be coughing all the time. Most persons suppose that a cough is a cough, the world over, and that what will cure one will another; and so they prescribe for themselves and their friends all sorts of syrups, home-made or proprietary, with the consoling assertion that "it can't do any hurt, if it don't do any good." How do you know it can't do any hurt? Do you know its ingredients, and, if so, have you studied their effects upon the system in health and in disease? Do you know the condition of the patient you are prescribing this for,—his constitution, his habits of life, his past history?

Let us see what a cough is. It is a sudden and forcible expulsion of the air from the lungs, preceded by a temporary closure of the windpipe to give additional impulse to the current of air. The effect of these spasmodic expirations is the removal of whatever may have accumulated in the air-tubes, whether a foreign body from without, as when a particle of food finds its way into the windpipe, or an accumulation of mucus secreted by the air passages themselves.

Coughing is in part a voluntary act. We can cough whenever we wish to, but frequently we are compelled to cough when we don't wish to. Nerves are divided into two classes, sensory and motor nerves. The former carry intelligence to the brain; they report any disturbance on the frontier to headquarters. The motor nerves then carry back the commands of the general to act. You tickle a friend's ear with a straw, and his hand automatically proceeds to scratch the itching member. A tickling sensation is produced in the throat by any cause whatever; the brain then sends back orders to the muscles concerned to act so as to expel the intruder, in other words, to cough. And that is how we cough.

The source of the impression may be various. Frequently it is due to an irritation of the respiratory organs by foreign bodies, dust, and acrid vapors, admitted with the air in health, or to damp, cold air itself, if the organs are particularly sensitive, or to the presence of mucus, pus, or blood, in disease. Inflammation, from whatever cause, acts as a source of uneasiness.

There are, as we all know, many different kinds of cough. Thus, we have the *dry* cough, without expectoration, and the *moist* cough, with expectoration. We have the *short, hacking* cough resulting from slight irritation, and the *violent, spasmodic*, and *convulsive* cough, caused by a greater degree of irritation or some peculiar modification thereof. Then there are the *occasional*, the *incessant*, and the *paroxysmal* cough, terms that explain themselves. *Hoarse, wheezing, barking, and shrill* cough are due to the tension or capacity of the rim of the wind-pipe, or other portion of the tube. The *hollow* cough owes its peculiar

sound to resonance in the enlarged tubes or the cavities in the lungs, if such exist. Sometimes the exciting cause of a cough lies not in the lungs and respiratory organs, but in the stomach, liver or intestines. In other cases there seems to be no real cause; it is purely nervous or hysterical.

Cough remedies should be suited to the kind of cough in question, and attempt, if possible, to remove the cause. It is evident that a cough may be lessened either by removing the source of irritation, or by diminishing the excitability of the nervous mechanism through which it works. Both methods are generally employed, and most of the popular cough medicines consist of an expectorant and a sedative, in some mucilaginous or saccharine menstruum. Sedatives lessen the excitability of the nerve centre through which the act of coughing is produced. Opium in sufficient quantities will stop any cough, but if the secretion goes on accumulating, the patient must be allowed to cough, or he dies of suffocation.

Glutinous and saccharine substances lessen irritation, and as it frequently happens that much of the irritation which occasions the cough exists at the root of the tongue, and in portions of the throat which can be reached by troches and lozenges slowly dissolved in the mouth; hence these often afford relief, especially in dry, hacking coughs and the so-called tickling in the throat. Iceland moss, marshmallow, and gum arabic belong to this class. Their power is probably due to their covering the inflamed and irritable surface directly with a mucilaginous coat, and thus protecting it from the action of the air and other irritants. An inflamed surface, whether within or without, is rendered worse by friction; therefore, in bronchial troubles, the inflamed surfaces are greatly irritated by the very act of coughing. Hence, persons are advised to "hould in," or try to refrain from coughing. All coughing beyond what is absolutely necessary for the removal of the accumulated mucus should be avoided, because it injures the parts affected by friction, and because it exhausts the patient; for the muscular exertion involved in a violent fit of coughing is very considerable indeed, and the muscular effort exerted by a patient with a bad cough during the twenty-four hours is really more than equivalent to that of many a man in a day's work. Both sedatives and mucilaginous substances can be employed, then, to check the excessive amount of coughing over and above that required to relieve the lungs and bronchial tubes of their accumulated mucus. To facilitate the removal of this, expectorants of various kinds are administered, according to the necessities of the case.

The difficulty in the way of recommending any one kind of cough remedy is that different coughs require different treatment, and what will relieve one may aggravate another. Then, too, the general health of the patient must be attended to, the secretions kept open, etc. In short, the maxim, "What is one man's meat is another man's

poison," applies here as elsewhere, and induces us to protest against the use of any nostrum simply because it cured a neighbor.—*Boston Journal of Chemistry*.

CHLORAL IN THE FIRST STAGE OF LABOR.

During the last few months (*St. Louis Courier of Med.*) I gave chloral to the majority of parturient women, excepting only those cases with which the first stage was short and easy, and few others where use was contraindicated by existing heart lesions. The following remarks are based upon 31 cases, mostly primiparæ. Mode of exhibiting consisted in giving 15 grains every half hour until patient came under its full influence; in unusual rigidity of the os 30 grains as the initial dose. Total amount in each instance varied from 30 to 75 grains, 45 grains being sufficient in the majority of cases. To a few patients 30 grains were given by enema; in the parturient state chloral appears to act more satisfactorily when given by rectum.

Chloral modifies the dilating pains of the first stage; renders them decidedly less frequent, more effective, and less harassing to the patient.

The teasing, wearing sensation in the interval between the pains, with its suffering, subside, giving way to peaceful somnolence. The effect is often so very striking that the parturient process seems to be entirely suspended. Digital examination during the pains, however, shows the uterine contractions to have increased in efficacy, from the more powerful protrusion of the amnion and the rapid progress of the first stage. No effect is appreciable on the third stage. The propulsive pains were frequent and vigorous. Chloral has the undubitable property of overcoming functional rigidity of the os, and this effect may be confidently looked for in all cases which have been fully brought under its influence. In some instances the rapidity of its action is surprising. I have repeatedly found that an os, which, after hours of severe pain, had remained small, rigid and almost cartilaginous, would become flaccid and freshly dilatable half an hour after the administration of thirty grains of chloral; but few cases will fail to yield after the lapse of two hours. The presence of fœcal matter in the lower bowels seems to counteract the action of chloral; in two cases of rigidity of the os, which had remained intractable for several hours, a speedy relaxation took place after the administration of soap water enemata; the rectum in both cases was empty.

I have been unable to discover any evidence of its action on the child. The frequency of the maternal pulse is always slightly diminished by chloral, but in no case have I found a corresponding decrease in the fœtal heart sounds. Neither have I been able to discover any traces

of the possible effect of chloral, after birth, on the child's pulse, respiration, sleep, and pupils. A case has been related to me in which two hundred grains had been given to the mother during the twenty-four hours preceding delivery; neither mother nor child showed any untoward symptoms. In chloral, then, we have a safe and powerful agent to alleviate and shorten the first stage of labor. I believe that more extensive observations will prove it to lessen the risk of laceration of the cervix. Dr. Emmet says: "At least one-half of the ailments of those who have borne children are to be attributed to lacerations of the cervix." Dr. Schenck says: The profession could do much if they would bear in mind that chloral in the early stage of labor is as necessary as they generally think ergot is in the later stages."—B. Bribach, M.D., *Gaillard's Journal*.

A PRACTICAL METHOD FOR PREVENTING THE SPREAD OF INFECTIOUS DISEASES IN HOUSEHOLDS.

Dr. Malcolm McLean, of this city, sends us the following practical method of preventing the spread of infectious diseases:

"For ten years past I have been experimenting with a simple method of quarantining cases of small-pox, scarlatina, diphtheria, measles, etc., and, as I have been able to get positively valuable results, I take the liberty of presenting it, simple as it is, to the profession for their trial. My plan consists simply in *filtering the atmosphere* which surrounds the patient through a carbolized or otherwise disinfectant sheet of muslin, which is closely tacked over the door-frames of the room in which the patient lies. I close all unnecessary doorways by tacking the sheet *all about* the frame, bottom, top, and sides. The *one* door which is needed for ingress and egress I protect by tacking a similar sheet across the top, down the whole side of the hinge side of the doorway, and down the lock side as far as within five feet of the floor. This filtering-sheet is made long enough to hang closely to the frame, and fall in folds upon the floor, where it is not tacked. By keeping such a sheet sprinkled with a solution of carbolic acid—I generally use Squibb's two per cent. solution—or other reliable disinfectant fluid, all, or nearly all, of the air of the infected room is *filtered* through a tissue which seems to *destroy the infection in its passage*. Moreover, the filter acts by moral effect, for it happens that intruders into the sick-room are very rare; and thus a great danger and prolific source of the disease is practically removed. Indeed, the whole household are reminded that there is a something within to be avoided. Of course the nurse must use care not to allow anything to be removed from the room in a condition to carry the poison without.

"After a fair trial of many years, assisted also by several of my brother practitioners (among whom I may mention Drs. I. B. Read, F. A. Smith and J. A. Walther), I am able to state that, in a list of about fifty cases carefully observed, I have succeeded, in all but *two*, in confining the infection or contagion to the patient first attacked. In the two instances of failure I had abundant evidence that the quarantine was grossly neglected.

"Dr. F. A. Smith had the kindness to report to me a most interesting test of this method which occurred in his own hands last winter. In an institution which the doctor was attending professionally a case of well-marked scarlatina broke out in the midst of scores of young children who slept in the ward. The case was removed to the nurse's room, and there quarantined by means of the filter, according to the method described above. The consequence was that not another case occurred in the institution. On other occasions, where the usual modes of isolation were alone adopted, the same institution had been swept with epidemic force. Dr. Smith expressed to me his belief, founded on experience, that, without the method mentioned in the case reported, he would have had scores of cases on his hands in a fortnight.

"The simplest way to sprinkle the sheet is to pour the disinfectant solution in a flat dish, and dip a hair-brush in it, and with this throw the liquid over the filter. There are three positive points gained by using this method: 1st. The air of the sickroom is not mixed with the air in the rest of the house. 2d. Visitors are much less likely to visit the sick-room. 3d. The air of the sick-room is kept more easily at an even temperature.

"In all of my cases I have found it unnecessary to close the ordinary door, the filtering-sheet taking its place."—*The Medical Record*.

HINTS FOR THE DIAGNOSIS OF OVAR- IAN TUMORS.

Dr. A. Macdonald gives the following hints in the *Edinburgh Medical Journal* for November:—

1. *Pregnancy*.—The possibility of pregnancy, the signs and symptoms of pregnancy, and waiting if in doubt, place the diagnosis beyond possible mistake, with a fair measure of care.

2. *Fibroid*.—A large fibroid with solid walls, leading to general enlargement of the uterus, is easily diagnosed. The increased length which the sound enters, the fact that the uterus moves with the sound, the peculiar feel of the uterus, and the nearly constant menorrhagia, suffice to keep the diagnosis correct. It is quite common to hear a bruit in a case of uterine fibroid; only in vascular sarcomata is such audible if the tumor is ovarian. But much greater difficulty is experienced

in cases of fibro-cystic tumors connected to the uterus, with or without pedicle. In that case we must try to ascertain whether the tumor is connected or disconnected with the uterus. Then the cyst of a fibro-cystic tumor may be tapped, when we expect to find only a thin fluid of great density, with some blood-corpuscles, and possibly some non-striped muscular fibres. But in those cases it is often found that only an exploratory incision can determine the diagnosis with accuracy.

3. *Renal Crsts* begin below the false ribs and extend downward and forward. They have a line of resonance between them and the liver, due to the transverse colon, which is of value, as showing they are not of hepatic origin, and when aspirated they contain urea. Usually accompanying such there are urinary symptoms, but not always.

4. *Ascites* exhibits the characters of free motion of fluid in an imperfectly filled cavity. Accordingly, when the patient lies on her back the abdomen is flattened anteriorly, the flanks give a dull note, and there is clearness round and above the umbilicus. With change of the patient's position the areas of resonance alter. Thus if the patient is turned on her left side, the right flank gives a clear note, and *vice versa*. In case of tapping an ascites the thick gelatinous fluid characteristic of ovarian tumor is never obtained.

5. *Hydatid Cyst of the Liver*.—In this case the tumor grows from the liver, distending first the distance between the ensiform cartilage and the umbilicus, the reverse of an ovarian cyst. Again, tapping and discovering acéphalocysts in the fluid is convincing evidence of the true nature of the tumor.

6. *Hysterical Abdominal Distention*, commonly known as spurious pregnancy, need deceive no one, as the percussion is uniformly resonant, and the tumor disappears under chloroform.

IODIDE OF POTASSIUM IN FRONTAL HEADACHE.

Dr. Haley states, in the *Australian Medical Journal* for August, that for some years past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy dull headache situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wineglass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who a quarter of an hour before was feeling most miserable, and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage.

AN IMPROVED METHOD OF TREATING UTERINE DISPLACEMENTS.

Dr. Robert Bell of Glasgow, gives the result of his experience in the treatment of uterine displacements by vaginal tampons of cotton-wool soaked in a solution of alum and carbolic acid in glycerine.

Dr. Bell's solution is the following: Glycerine, 80 oz.; alum, 10 oz., carbolic acid, $1\frac{1}{4}$ oz. This solution, it will be observed, theoretically—and Dr. Bell claims to have found, practically—fulfils most desirable indications. The glycerine depletes, and so lessens congestion by its affinity for water; the alum constricts, and so braces up the vaginal walls; and the carbolic acid, by its antiseptic properties, renders it possible for the cotton to be retained for a convenient length of time. He usually employs only one large tampon, but in some cases of flexion, uses two—a small one pushed well up in front or behind the uterus, and a larger one beneath it. In the case of prolapsus, if there be laceration of the perineum, this must be first rectified. The uterus is elevated as nearly as possible to its normal position, and there retained by a suitable sized tampon of cotton soaked in the solution. Thus can be retained for three or four days without becoming offensive, on account of the antiseptic ingredients. He claims to have seen patients thus completely cured of procladia, which had existed from three to eight years by perseverance in the treatment for from two to seven months.—*Am. Med. Digest.*

CONSTIPATION IN INFANTS.

The following are some of the remedies found useful by Dr. D. H. Cullimore (London Lancet):

1. A pellet of butter and brown sugar or treacle every morning fasting or a little raspberry jam.
2. The morning insertion into the rectum of a conical piece of white curd soap about two inches and a half long. It must be first dipped in warm water, held *in situ* for five minutes, and withdrawn.
3. Daily friction over the body, from the right iliac region along the course of the gut, with a salad oil. In India I have used cocoanut oil advantageously. Cod-liver oil is very useful when its smell is not objected to. *En passant*, I may say that I have at present under my care a girl of fifteen who for a couple of months has suffered from obstinate constipation. She has lately had typhoid. Both mild and strong purgatives were ineffectual, and it has now yielded to cod-liver-oil friction. Assiduous friction without any unguent is often equally useful. Patience, however, is necessary. A teaspoonful of fluid magnesia in the food is a good plan. Tomato jelly is sometimes used in India with benefit. Whatever plan may be adopted it is well to supplement it with the internal administration of half a drop of tincture of nuxvomica three times a day; a quarter of a drop is sometimes sufficient. Minute doses of sulphur also answer well.

ON SHORTNESS OF THE CORD AS A CAUSE OF OBSTRUCTION TO THE NATURAL PROGRESS OF LABOR.

Dr. Matthews Duncan read this paper before the Obstetrical Society of London. He said the obstruction arose from the morbidly early establishment of a solidarity of or union between the fetus and the genital passages, in which it should be easily moved. The cord was taut, then stretched, and advance of the fetus was difficult or impossible without injury. The cord might be absolutely short, or it might be made relatively short by encircling the neck or other parts of the fetus. Its length when stretched had to be considered as well as that when not stretched. Twelve inches of cord would stretch about two inches without breaking. Most cords would break with gradually applied tension by a weight of about eight pounds. Labor-power, if it breaks the cord, must of course be greater than its tensile strength. When the cord was shortened by encircling the neck its fetal attachment was, so far as delivery is concerned, the neck, not the navel, and the measurement from the placental attachment to the neck was about two inches longer than to the navel; hence a greater length was required in this relative shortening than in absolute shortening when the measure is to the navel. Disturbance of mechanism rarely occurred till the child was partly born. The cord might then be torn across or the placental end freed by separation of the placenta, or inversion of the uterus might occur, or the fetus might be born by a kind of spontaneous evolution. In this evolution, taking place after partial birth, the anterior surface of the body was by rotation made to look forward, so as to make the most of the length of cord. The cord-insertion was the fixed point. The cord was tight, and passed below the lower border of the symphysis between its two insertions. A cord of twelve inches measured to umbilicus, or one of fourteen inches measured to neck, in both cases inclusive of gain by stretching, would permit birth by spontaneous evolution if it was strong enough. A cord measuring under ten inches when stretched would necessitate rupture or cutting of cord, or inversion of uterus, or separation of placenta.

Dr. Barnes was surprised to hear Dr. Duncan describe the cord as sometimes springing from the upper edge of the placenta. Levert had pointed out long ago that the cord, if it sprang from an edge, always sprang from that nearest the os, and he had himself constantly verified this conclusion. He would submit, as a means of lessening the tension of a cord artificially shortened, the method of sion compressing the uterus downward during the second stage. Instead of losing time in trying to slip the loop over the head or shoulders he had found it better to cut the cord at once.—*Med. Times and Gazette.*

ALKALINE TREATMENT OF STERILITY.

Charrier (*La France Médicale*, May 24, 1881) has recently called attention to sterility produced by a case which he regards as but little known, but which has received considerable attention in the United States, namely, acidity of the utero-vaginal secretions. He concludes, First, that in certain rare cases in a perfectly healthy female, the utero-vaginal secretions may be acid enough to redden litmus paper. Second, that this acidity may prove an obstacle to fecundation, as spermatozoa did in a medium even slightly acid. Third, to remedy this normal acidity of the utero-vaginal liquid, an alkaline treatment (alkaline drinks and baths) should be used, and lukewarm alkaline injections. Fourth, that this acid state having been corrected, and the secretions having become neutral, the obstacle to fecundation is removed, and conception may take place. Fifth, that this disappearance of acidity under the influence of alkaline treatment explains the success with which sterility has been treated at alkaline and sulpho-alkaline watering places.

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THE INSPECTION AND REGULATION OF THE MILK SUPPLY.

The milk supply of large towns is becoming, at the present time, a serious problem. The frequent outbreak of infectious disease, directly traceable to polluted milk, demonstrates the necessity of a regular and systematic inspection of milk and dairies, in order to obviate as far as possible the dangers of pollution and adulteration. The Sanitary Inspector of Montreal has recently prosecuted several fraudulent milk men and obtained convictions in the Recorder's Court, and he is now investigating cases of systematic fraud perpetrated by milkmen upon some of our large charitable institutions.

The Manchester and Salford Sanitary Association, which is composed of physicians, chemists, architects, engineers, bankers, lawyers, merchants and other leading men, has recently memorialized the Local Government Board with reference to the inspection and supervision of the milk supply. Their conclusions (*British Medical Journal*) are as follows :—

1. That severe and fatal epidemics of scarle fever and typhoid fever have undoubtedly been caused by impure milk.

2. That it is probable that other diseases, such as diphtheria and cholera, may be conveyed in a similar manner.

3. That certain other serious maladies affecting human beings have been traced to the milk of cows affected by disease, or kept under unhealthy conditions.

4. That adulterated milk is also frequently a cause of disease among children, especially diarrhoea.

5. That the only means at present existing of effectually protecting the milk supply consists in the formation of voluntary dairy associations. As the benefits of such associations can only be enjoyed by a limited number of the milk consumers, the Association urges the Board to invest the local authorities with the following additional powers :—

(a) To enable the local authorities to require every licensed milk-seller to give due notice of the appearance of any infectious disease among his dairy stock, in his family, or in the house in which his premises are situated. (b) That on such notice being received by the Sanitary authority, it should be empowered to close the said premises until the removal of the infected animal or person, and the thorough disinfection of the house or portion of the house infected. (c) To enable local authorities to veto the sale of milk by vendors coming from without such authorities' boundaries.

The Association further urges :

1. That inspectors be appointed by the Sanitary authorities, whose whole time should be employed in inspecting dairies, milk-shops, etc.

2. That no person be allowed to sell milk in towns who is not licensed to do so by the local Sanitary authority.

3. That the fitness of premises for the sale of milk for dairy purposes, and for housing milch-cows, should be decided on by the local medical health-officer.

4. That samples of milk for analysis should be collected from time to time by the inspector or his agents, from every licensed milk-shop or dairy, and not merely from those against whom special complaint has been made.

5. That a general inspector of milk-supply be appointed by the Local Government Board, whose sole duty should be to superintend the duties of milk-inspectors and medical health-officers in this department of their work.

As the provisions of the New Health Bill of the Province are at present under consideration, we beg to commend these suggestions of the Manchester and Salford Sanitary Association to the attention of the profession and those interested in Sanitary reform.

OPHTHALMIA NEANOTORUM.

Few infantile diseases are more troublesome and annoying than purulent ophthalmia in the new-born. It is generally attributed to direct inoculation with the maternal discharges during birth, or else to such external sources of irritation as prolonged exposure to a bright light, the use of strong soap, etc. Nurses usually have their own cherished methods of treatment, and often conceal the existence of ophthalmia from the medical attendant till they have fruitlessly tried their own favorite applications of warm milk, breast-milk, bread poultices, etc. The disease has frequently advanced so far by that time, that several weeks of careful treatment are necessary to effect a cure; and in bad cases, when the cornea is much involved, the sight is often permanently impaired or destroyed. With a view of preventing this distressing malady, Credé has made a careful study of 600 consecutive cases of new-born infants, and has recently published the results of his observations. In 300 of these cases, he caused both eyes to be thoroughly cleansed with a soft rag during the first bath, and one drop of a two-per-cent solution of nitrate of silver introduced into each eye. Although the conditions and surroundings of these children were most unfavorable, not one so treated suffered from ophthalmia. Credé confidently recommends this simple measure as a safe and certain prophylactic.

PROFESSOR SAMUEL D. GROSS has recently resigned the chair of Surgery in Jefferson Medical College, Philadelphia, a post which he has filled with

eminent ability for twenty-six years. His reputation as a surgeon and teacher and his personal popularity have largely contributed to the success and reputation of the Philadelphia School. He is best known to the profession as the author of a "*System of Surgery*," which has gone through five editions, and deservedly ranks as one of the best and most complete of our standard works on the subject. He has reached the good old age of seventy-seven, and is still vigorous and hearty. The chair of Surgery will be filled jointly by his son, Dr. Samuel Gross, and Dr. J. H. Brinton.

PATHOLOGY IN VIENNA.—Considerable dissatisfaction seems to exist in European Medical circles at the appointment of Prof. Kundrat of Gratz to the chair of Pathology, which was rendered vacant last year by the death of Prof. Heschl, the successor of Rokitsansky. Prof. Kundrat has not achieved reputation by any special original research, nor does he possess unusual ability as a lecturer or teacher; he owes his appointment entirely to political influence, his father being a valet to the Emperor. He has thus been able to override the claims of such men as Arnold of Heidelberg the nominee of the Faculty of Medicine, Klebs of Prague, Rindfleisch of Wurzburg, Cohnheim of Leipzig, any one of whom would have filled the chair with credit to the University, and would have been a more worthy successor to Rokitsansky than its present occupant.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The semi-annual meeting of this College (the Provincial Medical Board) was held in the old Government House (Laval Medical School), Montreal, on the 10th May, Dr. R. Palmer Howard, President, in the chair. The attendance of Governors was good, only six being absent. After the opening of the meeting resolutions of condolence with the families of the late Drs. Munro and Bibaud, of Montreal, and Dr. Dubé, of Rivière-du-Loup, were passed, and copies ordered to be sent to the relations of deceased. The President announced that at the present session of the Legislature the College had obtained important amendments to its Act, having especial reference to the penal and prosecuting clauses of the Act. These amendments were drawn up by the Hon. Mr. Mercier, and

before presentation to the Legislature were submitted to and approved by the Governors of the College representing Montreal and Quebec. The tariff which had become law only last year was abolished, but the right to make a tariff was still possessed by the College.

The Board of Preliminary Examiners reported that the following gentlemen had successfully passed the required examination, and been admitted to the study of medicine:—Alfred Letourneau, H. Ernest Choquette, Albert Rolland, Ovide Ostigny, Charles Collet, John L. Duffett, Toussaint Charron, Charles Pilon, F. Marquis, Jules Laberge, L. J. Hercule Roy, Alfred Poole, Alex. Boucher, A. Faucher de St. Maurice, Aquilas Cheval, Auguste F. Schmidt, Wilbrod Henault, Henry Dauth, Anaclet Bernard, James B. Gibson, Hercule Roy, Eugene Mackay, Arthur Delisle, Joseph Rodier, A. N. Worthington, Charles Rochon and L. J. N. Delorme. Twenty-one candidates were rejected, three upon certain branches upon which they will again be examined next Sept., and eighteen rejected upon all subjects. The assessors of the various schools reported favorably on all the examinations. The question as to the right of Dr. Keyes, of Georgeville, P.Q., to register his Eclectic diploma, granted in 1868 by the Province of Ontario, came up for discussion. The Secretary read the opinion of the Hon. Dr. Church, Q.C., a member of the College, affirming Dr. Keyes' right to register; also an opinion obtained by the College from W. H. Kerr, Q.C., to the same effect. The subject was deferred to another meeting for discussion and action.

Mr. C. E. Lamirande, the detective officer of the College, presented his report for the past six months, showing that during that time he had taken out twenty-two actions; of these, eleven had resulted favorably to the College, four had been dismissed, and seven were still pending in court. He reported having compelled two persons to properly qualify themselves by taking out the license, and to having collected a considerable amount of arrears of annual contributions. The collection of the annual subscription was placed in Mr. Lamirande's hands. The committee to whom had been referred the charges against Dr. A. M. Ross, and who reported at the last semi-annual meeting that the Act gave them no power to act, again reported that, in accordance with the instructions given them, they had met and decided to suggest that the following be inserted in the Medical Act, with a view

of meeting such and similar cases:—"Any registered member of the medical profession who shall have been convicted of any felony in any court of law, or who shall have been guilty of infamous or disgraceful conduct in any professional respect, shall be liable to have his name erased from the register, and in case of a person known to have been convicted of felony, or who has been guilty of infamous or disgraceful conduct in any professional respect shall present himself for registration, the Registrar shall have the power to refuse registration. The Provincial Medical Board may, and upon application in writing of any three registered members of the profession in this province, shall cause enquiry to be made in the case of any person alleged to be liable to have his name erased from the register under the provisions of this section, and on proof of such conviction or of such infamous or disgraceful conduct as aforesaid, shall cause the name of such person to be erased from the register."

The following gentlemen were appointed a committee to arrange a new tariff of fees, and to be ready to report at the September meeting of the College: Drs. Lemieux and Parke (Quebec), Drs. Lachapelle and F. W. Campbell (Montreal), (Dr. Perreault (Longue Pointe), Dr. Prevost (St. Jerome), Dr. Ladouceur (Sorel), and Dr. Worthington (Sherbrooke).

The President suggested that it would be well to confine the new tariff to a few items, and to have the fees for operations, &c., left a matter for arrangement between physician and patient.

The following women, after examination, were found qualified and received the Midwifery Diploma of the College: Mrs. Mary Davies, Mrs. Mary Bohme, Mrs. Jessie McNab, Mrs. Margaret Miller, Mrs. Elizabeth Sutherland, Mrs. Sophie Husson, and Miss Emily Harris.

The following gentlemen presented diplomas from the Universities named, and after being sworn, received the license as member of the College:

McGill University—A. A. Henderson, M.D., Ottawa; Wm. Stephen, M.D., Montreal; Alex. D. Struthers, M.D., Frelighsburg, Q.; Hastwell W. Thornton, M.D., New Richmond, Q.; Alex. H. Dunlop, M.D., Pembroke, Ont.; Robt. H. Klock, M.D., Aylmer, P.Q.; Wm. G. Duncan, M.D., Granby; W. B. Burland, M.D., Port Kent, N.Y., U.S.; R. C. McCorkill, M.D., West Farnham.

University of Bishop's College—Walter J.

Prendergast, M.D., Montreal; Ninian C. Smillie, M.D., Montreal; James L. Foley, M.D., L.R.C.P., London, Montreal; William D. M. Bell, M.D., Ottawa.

Victoria College—Fred. St. Jacques, M.D., St. Anne des Plaines; J. Bte. LeRoy, M.D., Montreal; Jos. H. Gauthier, M.D., St. Pie; Felix P. Vanier, M.D., St. Martin; Samuel K. Kelly, M.D., French Village, Kingsey; J. Bte. Maillet, M.D., Memramcook, N.B.; Alex. Snyck, M.D., Wright; Horace Manseau, M.D., Montreal; Napoleon Dubeau, M.D., St. Gabriel de Brandon.

Laval University—Albert Marois, M.D., Joseph A. Marcoux, M.D., Auguste C. Hamel, Laval University, Montreal; Isaie Cormier, M.D., Montreal; Joseph Cuerrier, M.D., Coteau Landing; Ovil Maillet, M.D., Montreal.

Dr. Larocque, Health Officer of Montreal appeared before the College, and advocated the Public Health Bill, now before Parliament. A resolution heartily endorsing it was unanimously passed, after which the College adjourned.

WOMAN'S HOSPITAL.

At the Annual Meeting of the Corporation of the Western Hospital, held in Montreal on the 9th inst., a scheme for the amalgamation of the Western Hospital and Woman's Hospital was proposed and adopted. The basis of agreement is as follows:

1. That the "*Woman's Hospital*" become the "*Woman's Department of the Western Hospital*."
2. That the Medical Staff of the Woman's Hospital become the Medical Staff of the Western Hospital. Vacancies to be filled up according to the by-laws of the Western Hospital by vote of the Governors.
3. That the Obstetrical department remain under the control and superintendence of the Professor of Obstetrics in Bishop's College.

Subsequently, on the 11th inst., the Life and Elective Governors of the Western Hospital met for the purpose of electing the Executive Officers and Medical Board. The election resulted as follows:—President, Hugh McLennan; 1st Vice-President, Major Mills; 2d Vice-President, James Coristine; Secretary, Robert Reid; Treasurer, J. M. Kirk.

Committee of Management.—Messrs. George Childs, Wm. Kennedy, Chas. Gould, Geo. Wait, M. C. Mullarky, G. R. Prowse, A. A. Ayer, I., H. Stearns, A. W. Ogilvie, D. J. Rees, G. W. Reed, W. C. Munderloch.

Medical Staff.—Consulting Surgeon, Dr. Hings-ton; Consulting Physicians, Drs. David, Kollmyer and Simpson; Attending Physicians, Drs. F. W. Campbell, Kennedy, Wilkins, Perrigo, McConnell, Wood, Armstrong and Cameron; Oculist and Aurist, Dr. Proudfoot.

A joint committee is engaged in drafting a code of by-laws and arranging for the more thorough and efficient working of the Hospital. Hitherto the obstetrical, surgical and private patients have been obliged to occupy the same building; but the Governors are now contemplating the erection of a separate wing for the obstetrical department, so that the obstetrical cases can be thoroughly isolated and the whole of the present building devoted to surgical and private wards. The Woman's Hospital has already established a wide reputation, and is attracting patients from all parts of Canada and the United States; it is confidently anticipated that its amalgamation with the Western Hospital will increase its usefulness, and afford it extended facilities for carrying on its special work.

PERSONAL.

Dr. John Campbell (M.D., McGill, 1872), of Seaforth, Ont., has lately passed the examination for the license of the Royal College of Physicians, Edinburgh.

Dr. Dawson (M.D., McGill, 1882), son of Principal Dawson of McGill University, has been appointed Surgeon in connection with the Langdon & Shepard contract on the Canadian Pacific Railway.

Dr. Girdwood, of Montreal, has been appointed Surgeon of the Eastern Division of the Canadian Pacific Railway.

Dr. John W. Cameron (C.M., M.D., Bishop's, 1882), has been appointed House Surgeon of the Woman's Hospital, Montreal.

Dr. Ninian C. Smillie (C.M., M.D., Bishop's, 1882), has located in Gaspe.

Dr. W. D. M. Bell (C.M., M.D., Bishop's, 1882), has opened an office in Rideau street, Ottawa, where he intends to locate permanently.

Dr. Henderson, the retiring House Surgeon of the Montreal General Hospital, has commenced practice in Montreal.

Dr. Reed, for several years the House Apothe-

cary of the Montreal General Hospital, is severing his connection with that Institution. He intends devoting himself entirely to practice.

Dr. Leprohon, the Spanish Vice-Consul here, has been honoured by being created a Chevalier of the Order of Charles III.

ON THE USE OF MALTINE.

Dr. Fothergill says, in the *Practitioner*, that in order to aid the defective action upon starch by the natural diastase being deficient in quantity, or impaired in power, we add the artificial diastase, as "maltine." But, as Dr. Roberts points out, in order to make this ferment operative it must not be taken after a meal is over. Rather, it should be added to the various forms of milk porridge or puddings before they are taken into the mouth. About this there exists no difficulty. Maltine is a molasse-slike matter, and mixes readily with the milk, gruel, etc., without interfering either with its attractiveness in appearance, or its toothsome-ness; indeed, its sweet taste renders the gruel, etc., more palatable. A minute or two before the milky mess is placed before the child or invalid, the maltine should be added. If a certain portion of baked flour, no matter in what concrete form, were added to plain milk, and some maltine mixed with it, before it is placed on the nursery table, we should hear much less of infantile indigestion and malnutrition.

SOCIÉTÉ MÉDICALE ANGLO-AMÉRICAINE DE PARIS.

The English and American physicians resident in Paris have just organized a Society under the above name. Only those can be members who are legally qualified to practice in France. We see with pleasure that the Society has elected as its president Sir John Rose Cormack. This compliment is well deserved, Sir John being a universal favorite among the medical profession in Paris.

REVIEW.

The Brain and its Functions. By Dr. J. LUYS, Physician to the Hospice de la Salpêtrière. New York: D. Appleton & Co. Montreal: Dawson Bros. Price \$1.50.

This volume, No. XXXIX of the International Scientific Series, is one of the best which has been issued, both from the importance of the subject

and the well-known ability of the author. The first part of the book is devoted to a consideration of the minute anatomy of the brain, as determined by the author's photo-microscopic process of analyzing the nervous elements. He dwells specially upon the intimate relations which exist between the cerebral cortex, the central ganglia and the periphery. He maintains that the function of the *optic thalamus* is to receive and reinforce sensorial excitations from the periphery, while that of the *corpus striatum* is to permit the passage of voluntary motor excitations. He claims that in the arrangement of the superficial small cells and deeper large cells of the cerebral cortex, there is a distinct analogy to the anterior and posterior tissues of the spinal cord. He agrees with Ferrier that the cerebral functions are localized, and has arrived at this conclusion quite independently by means of his anatomical researches. Part second, in which he discusses the physiological relations of the different nervous elements, is the most interesting and valuable portion of the book. He discusses the fundamental properties of nerve-cells under three principal heads:—

1. *Sensibility*—by means of which the nerve-cells receive impressions from without and react upon them.

2. *Organic phosphorescence*—by means of which the nerve-cells store up for a long time impressions which they have once received, just as certain inorganic bodies store up luminous vibrations and become phosphorescent. By virtue of this property of the nerve-cell, he explains in a very interesting manner the phenomena of memory, its method of development and functional disturbances.

3. *Automatic activity*—by means of which the nerve-cell reacts in the presence of surrounding media, if once it has been previously impressed by those media. That which is done habitually is finally done automatically, and becomes routine.

Dr. Luys' main endeavor throughout is to shew that even the most complex intellectual processes follow definite laws, and may be analyzed and resolved into regular processes, and that consequently "there is a true physiology of the brain as legitimately established, as legitimately constituted, as that of the heart, lungs or muscular system."

The book, though in many respects fragmentary and incomplete, is on the whole entertaining and instructive.

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ABSCESS OF ANTRUM.

Communicated by Dr. C. E. NELSON, of New York.

In bringing the following case before the readers of the RECORD, I wish to draw attention to two points: First, the grave mistake in the original diagnosis, and, second, the ingenious nature of the operation which was subsequently performed.

A gentleman in the prime of life suffered from an extensive swelling of the face with extrusion of the eyeball, caused by an abscess of the antrum. Believing that the trouble was mainly in the eye, he consulted a celebrated New York oculist, who advised immediate removal of the eyeball. Subsequently he consulted Dr. George P. Miles, a New York dental surgeon, who diagnosed abscess of the antrum from a diseased molar tooth. He believed the eye to be uninjured, and gave it as his opinion that, when the pus was evacuated and the swelling reduced, the eye would return to its normal situation.

Instead of extracting the decayed tooth and puncturing the antrum with a trochar, as is usually recommended in such cases, Dr. Miles drilled through the tooth and socket into the antrum, and through this small opening perfectly evacuated the abscess cavity, the swelling rapidly subsided and

the eyeball returned to its normal position. The decayed tooth was subsequently treated, and the patient eventually made an excellent recovery without losing either eye or tooth. The importance of accurate diagnosis in such a case is self-evident.

Progress of Medical Science.

DIPHTHERIA.

By J. SOLIS COHEN, M.D., Physician to and Lecturer on Clinical Medicine in Jefferson Medical College Hospital, etc.

How are we to manage our cases of diphtheria? This is the all-important question. We cannot cure it. It has certain stages of evolution through which it must pass which no specific can arrest; and our duty is to guide the patient through them as safely as may be, and sustain him if we can. Some cases recover spontaneously, there is no doubt, but we can rarely trust to the unaided efforts of the system. The two main indications in my estimation are to keep up a supply of nourishment and stimulants, and to provide for the detachment and discharge of the morbid accumulations when they threaten to occlude the air-passages. Depleting measures, formerly recommended in croup, are no longer resorted to in diphtheria; another clinical point, to my mind, strongly indicative of systemic difference between the two affections. We must bear in mind, as I have indicated, that there is an adynamic blood disease to be resisted, and a local product to be watched. Let us discuss these two

points separately. The blood is the liquid flesh, so to speak, in which all recuperative power resides. The healthier the condition in which it can be maintained, the surer the prospect of recovery from the disease. Hence efforts should be made to regulate all contaminating influences that are within our control. We should provide for systematic disinfection of the sick-room in particular, and for disinfection of the whole house likewise. This can be done by the free use of sprays of carbolic acid or of sulphurous acid. Solutions of sulphate of iron or some other disinfectant should be kept in all the vessels to be brought into the sick room to receive the discharges, soiled clothing, refuse food, and slops of the patient. In this way we guard against additional contamination of the poisoned blood from the emanations and discharges of the patient himself. At the same time, too, and what is of the utmost importance prophylactically, the attendants of the patient and the remaining inmates of the household are protected in part from direct contagion, and from impairment of reserve vigor, which might render them particularly liable to that contagion.

As to the patient himself, assiduous cleansings of mouth, throat, and nasal passages, should they become fouled from retained secretions, with ample supplies of digestible food, and the administration of a tonic remedy, than which none, perhaps, is more serviceable than tincture of the chloride of iron, will be all that will be required anterior to the appearance of the local morbid product; unless there should be such indication of profound septicæmia or collapse, which would call for large doses of quinia, or alcoholic stimulation, respectively.

And right here, gentlemen, let me direct your attention to a significant clinical fact, the truth of which you can verify by your own studies and observation. It is this: Chlorine compounds, whether administered internally or applied topically, are more frequently efficacious in diphtheria than any other remedies. Read the records of writers and you will see extolled tincture of the chloride of iron, which I place for you in the first rank, chlorate of potassium, chloride of ammonium, chloride of mercury, chlorine mixture, hydrochloric and nitro-hydrochloric acids. Other remedies, similarly extolled, have this in common with the chlorides, that they have disinfectant properties. This adds to the list sulphurous acid, sulphites and hyposulphites, carbolic acid, benzoate of sodium, and other drugs of similar qualities. But it is not my intention to enumerate the various modes of treatment lauded in diphtheria. The vaunted success in many instances has been due to the misapprehension that prevalence of common membranous sore throat was prevalence of diphtheria. It will suffice to fix your attention upon those remedies which, in my judgment, are most entitled to confidence. We return, then, to the tincture of the chloride of iron. It must be administered at frequent intervals and in large doses. The object is

to make as profound a beneficial effect on the health of the blood as practicable. Hence we give from five to twenty or even thirty drops according to the age and vigor of the patient, *every second hour, hour, or half hour*. It may be given in glycerine and water, or in diluted syrup of lemon, or in any pleasant way with which you may become acquainted. It is quite probable that the alcohol in this preparation has some beneficial influence constitutionally; for, as will be stated to you presently, alcohol is of the utmost efficacy once the constitutional vigor begins to manifest rapid or steady deterioration. The frequent deglutition of this remedy, in addition, brings it in frequent contact with morbid products accumulating upon the deglutitious tract; and exerts a desirable physical impression upon those products, akin to that specially sought for, when, as I shall mention shortly, it is resorted to as one of our most trustworthy agents in topical medication.

Chlorate of potassium is extensively administered as a constitutional remedy in diphtheria; frequently in the form of the *chlorine mixture*, which is prepared with an equal number of grains of the chlorate and of drops of hydrochloric acid in plain or aromatic water, infusion of quassia, and so on. The dose of the chlorate varies from two to fifteen grains, according to the age of the patient, every third or second hour, or more or less frequently, as may be. It is quite common to combine this remedy with the tincture of the chloride of iron, and in the same mixture. A better plan is to have the two drugs prepared separately, and then combine the mixture, at the bedside, so that the quantity of one drug may be varied, if required, without affecting the dose of the other. Let me caution you about an immoderate use of chlorate of potassium. Look out for evidence of renal irritation, and suspend its administration until such untoward symptoms subside. In view of the normal tendency to albuminuria and to renal disintegration in diphtheria, it is important that no abnormal load be laid upon the kidneys, whose excretory offices are fully taxed as active participants in the elimination of the poison from the system. The local action of the chlorate of potassium on the mouth and throat, and its excretion through the salivary and pharyngeal mucous glands, enhance its efficacy as an internal remedy in diphtheria. It may be given in lozenges or in compressed pills, and allowed to dissolve slowly in the mouth, so as to prolong its contact with the diseased surfaces.

Quinia is a remedy much employed in the treatment of diphtheria; in part as a tonic, in part as an apyretic, in part as a neurotic, and in part as an antiseptic. As it is desirable to combine important remedies when practicable, to avoid too frequent dosing, and as chlorine compounds seem to be especially serviceable in diphtheria, in fact in affections of the respiratory organs generally, I prefer the hydrochlorate of quinia to the sulphate.

It is fully as efficacious, incomparably more soluble, and can be manufactured at much less expense. It is given in decided doses until there is abundant evidence of constitutional impression. When deglutition is painful or difficult, it may be given by enema, with proper augmentation of the dose. Under similar circumstances, it is better to persevere in giving the iron and potassium by the mouth, as their topical effect upon the throat is of certain significance.

Alcohol, in the form of strong wine, or as brandy or rum, is of the utmost importance when the system begins to give way; and its free administration should not be delayed after the earliest manifestations of decided loss of vigor. At this stage it is of more importance for the time being than any other remedial agent. From half a drachm to an ounce of brandy, or its equivalent, proportionate to the age of the patient, may be given at suitable intervals to keep up the effect, be the intervals three or four hours or but fifteen minutes. Indications for its continuance or suspension will be promptly afforded by the general condition of the patient. As long as it is well borne, it may be given to any extent appearing necessary, short of producing actual alcoholic intoxication, especially so when sufficient nourishment cannot be taken. Children readily take a sort of syrup of brandy made by burning it beneath a lump of sugar which becomes melted in the process.

Though other internal remedies are often valuable in diphtheria, especially under varying circumstances, I feel like stopping with the short list just commented on. It is proper, however, to mention a new treatment, highly lauded of late years in Teutonic Europe, but not sufficiently endorsed at present to justify unqualified approval. It consists in the administration of large doses of benzoate of sodium, the use of which is based on the opinion that it arrests the development of the diphtheritic cryptogamia. As considerable attention has been directed to this subject, which has not yet become incorporated into general professional literature, it may be well to mention the formulæ used by Letzerich, the promulgator of the method. Five grammes of pure benzoate of sodium are dissolved in forty grammes each of distilled water and peppermint water, to which are added ten grammes of syrup of orange peel. To infants less than one year of age, two teaspoonfuls of this mixture are given every hour; to older patients the mixture is given in tablespoonful doses, the amount of benzoate of sodium being increased from five to seven or eight grammes for children from one to three years of age; still further increased to from eight to ten grammes for children between three and seven years of age; still further increased to from ten to fifteen grammes for children above seven years of age; and increased to as much as from fifteen to twenty-five grammes for adults. In addition to this internal administration of the drug, the false membranes are dusted over with powdered benzoate of sodium, two or three

times a day in mild cases and every three hours in severe ones. The drug is also administered in gargles; a five per cent. solution being sufficient for older children. I have no experience with this treatment, nor any personal knowledge of it whatever.

I may add, too, a few words as to carbonate of ammonium, sometimes a remedy of great value at moments of sinking. From two to ten grains may be given in syrup of acacia, or other vehicle, to be repeated whenever indicated; and in case of difficulty of swallowing, it may be administered by the bowel in quadruple quantity. In cases of threatening accumulation of fibrin in the right heart, large doses are indicated theoretically on the basis of observations which have shown that its admixture with blood preserves the fluidity of the latter for some time. It is possible, too, that intravenous injections of the solution of ammonia may be resorted to with temporary, if not with permanent benefit at moments of collapse; but I have no data in illustration of the value of the inference.

What shall be done for the sore throat? what for the swollen and painful glands? Pellets of ice placed in the mouth, and renewed more or less continuously, are as grateful and soothing a means of local relief as lies at our command. Iced compresses are used externally by some prominent practitioners; but they cannot always be employed with impunity; and their use should be discontinued if not promptly serviceable. It is often better to apply warm cotton-batting, spongio-piline, or an actual cataplasm. Inunctions with oil, lard, cosmoline, are often useful; care being taken to use nothing which might favor abrasion of the cuticle, lest local infection further complicate the disease. Great pain requires the use of morphia in effective doses by stomach, bowel, or skin, as may be most available. Prompt discharge of the morbid products as they accumulate has been indicated as an important object in the management of our case of diphtheria. How shall this be secured? Shall it be by removing them bodily whenever they are favorably located for detachment and withdrawal? To those who regard the local product and its extension as the more important feature of the disease, such a method seems highly desirable. If there be a circumscribed patch undergoing spontaneous detachment, there can be no objection to its extraction. Indeed its removal is indicated, as getting rid of effete material, the decomposing elements of which are being drawn into the lungs at every inspiratory movement; thus adding additional contamination to the blood.

It is quite possible, in favorable cases, to keep the morbid product diffuent by maintaining a warm and equable temperature in the sick-room, which should be well ventilated without exposing the patient to direct currents of air, and provide an excess of humidity of the atmosphere by hanging wet cloths around, or keeping up a moderate evolution of steam near the patient. The moister the products, the more readily they can be expecto-

rated. When they remain dry and adherent, there is no objection, if fully within the reach of instruments, in making an attempt, by a thorough topical medication, to arrest their further progress, and thus remove the local source of danger; but should the first application fail in this object, no repetition should be made. The practice of cauterizing the uninvaded tissue is reprehensible, because the local product is likely to appear on abraded surfaces. Of all the local agents of which I have any bedside experience, the tincture of the chloride of iron has been by far the most efficacious. It should be applied with a swab of cotton or sponge, which is pressed with considerable firmness against the pseudo-membrane, so as to favor thorough contact. After the application, attempts should be made by gargle, spray-douche or syringe, to remove the deposit; but forcible removal is not judicious, unless it is already partially detached. Lime-water is the best solution to use in the douche or syringe. So much for the accumulations in pharynx and nasal passages.

When the larynx becomes invaded, then the best plan I am familiar with is to keep up a constant evolution of steam passing over the face of the patient; and, in addition, to slake a few pieces of lime the size of the fist, by the bedside every hour or two, or whenever the respiration becomes obstructed; covering the vessel with a hood of stiff paper, so as to direct the steam and particles of lime towards the mouth of the patient. I do not subscribe to the opinion that the lime vapor is capable of dissolving the membranes *in situ*; but I believe that the particles of lime inhaled act mechanically, becoming insinuated beneath them at numerous points, and thus affording minute inlets for the watery vapor, which detaches them, and facilitates their expectoration by cough.

The use of emetics is indicated in children to provoke expectoration from the air-passages in the act of vomiting; but the same indication does not occur in adults who are able to expectorate voluntarily. If successful, the emetic may be repeated, at intervals of six hours, as long as the indications continue to recur. Alum, ipecac and turpeth mineral are the most reliable agents, and may be tried in the order named: adhering to the alum if it prove efficient. Emesis should not be carried too far, or be repeated if ineffectual, as it exhausts the power of the system without any compensation in the discharge of morbid products.

Should asphyxia be threatened from accumulations in the larynx or trachea, tracheotomy is indicated; and though most frequently unsuccessful in averting death, it facilitates due access of atmospheric air to the lungs, and often saves lives that would otherwise be lost.

The most careful attention is required after tracheotomy to keep the artificial passage clear. The stimulating treatment and the lime inhalations should not be discontinued.

The two main indications for favorable prognosis after tracheotomy are desire for food, and

ability to expectorate. All treatment should be subservient to facilitating these great ends.

Paralytic sequelæ sometimes follow diphtheria. They are to be managed on general principles; and they usually subside without leaving permanent traces.—*Medical News and Abstract.*

THE TREATMENT OF CROUP.

A Clinical Lecture.

By WM. T. PLANT, M.D., Professor of Clinical Medicine and Diseases of Children in Syracuse University, Syracuse, N.Y.

GENTLEMEN: Membranous laryngitis is one of the diseases in which medical treatment has always been most vacillating and unsatisfactory. Our fathers, rightly regarding it as a violent inflammation, fought it determinedly with their deadliest weapons. These, in the words of an old author,* were "bleeding, emetics, purgatives, and blistering."

Bleeding, first, "so as nearly to produce fainting;" if not relieved, more blood "by several leeches over the trachea." After bleeding, an emetic of ipecac and antimony, to be again and again repeated if the continuance of the disease—and the patient—afforded an opportunity. At the same time—and the sooner the better—"a large blister all across the throat or upper part of the chest" was in order. It was further recommended to keep up brisk purgation with calomel and jalap throughout the entire course of the disease. These sledge-hammer blows were supplemented by frequent smaller doses of tartar-emetic and calomel. To all this was added the "antiphlogistic regimen," which, in those days, meant little nourishment and no stimulants. Unless you call to mind the cat-like tenacity of life inherent in some children, you will be surprised when I tell you that a few survived both the croup and the treatment.

We do not work in that way now. If, as is often the case, we cannot do much good with our remedies, we endeavor not to do harm, and that is more than can be said for the old way.

If the medical treatment is to be of avail, it must be instituted early. In croup, delay is not only dangerous; it is fatal. As soon as a laryngeal cough, an increasing hoarseness, and obstructed inspiration give warning, the child, *nolens volens*, should be put to bed. The room should be well warmed; from 80 to 85 degrees Fahr. is not too high. The air should be moist as well as warm. A warm and moist air is relaxing and soothing; a cold and dry air is irritating to the inflamed larynx, and tends to induce paroxysms of cough and dyspnoea. There are different ways of charging a room with moisture. If it is warmed by a cook-stove, vessels of water may be kept boiling. The objection to this plan is that, if the apartment is small, it becomes overheated. Large

* Thomas' Practice, 1815.

volumes of steam may be generated by dropping hot irons or bricks into a vessel of water. Another plan, and an excellent one, is to curtain the bed with blankets and introduce steam through a tube communicating with a vessel of water standing outside the inclosure, over a gas or spirit lamp. In some children, spray may be sent directly to the inflamed surface by the steam atomizer. From ten to fifteen minutes' steaming every hour or two does much to soften the cough and relieve the dyspnoea. This instrument also affords a ready means of carrying a medicated vapor to the seat of trouble. Just now lime-water is being much used, there being some evidence that it has a solvent effect on the false membrane. Though doubting whether the minute quantity of lime introduced in this way can have an appreciable effect, I would not discourage its use, since the vapor of lime water is at least as good as that of pure water. There are other solvents of pseudo-membranes. Among the best of these is, according to experiments recently made at the New York Foundling Hospital, liquor sodæ, diluted about fifty times with water, or, perhaps better, with aqua calcis; it may be used freely with the atomizer. Feeble solvent power is also claimed for both lactic acid and chlorate of potash. If any of these agents can destroy the membrane, they should *a fortiori* prevent its formation if used early enough.

If not disagreeable to the patient, I think it well to add a little carbolic acid to these atomizing fluids. Unfortunately, some children are so young and many are so perverse, that effectual use of the atomizer is very difficult. But do not fail by some one or all of these methods to furnish to the child for at least a large part of the time a steam-laden atmosphere.

Perhaps something may be gained by the application of mild counter-irritants over the larynx. A slice of salted fat pork, made more irritant by dusting its applied surface with mustard, or black pepper, or powdered camphor, and stitched to a cloth passing around the neck, answers a good purpose. Hot poultices, and cloths and sponges wrung from hot water, are sometimes bound upon the neck. Without great care, they wet the clothing and the upper part of the chest, and do more harm than good. Some practitioners prefer the continuous application of cold, but I have had no experience with this method.

The hoarse dry cough and the tendency to dyspnoea will suggest to you an early resort to emetics and expectorants. It used to be thought, and some are still of opinion, that there is peculiar virtue in the harsher and more depressing emetics, such as antimony and hive syrup. For myself, while not objecting to giving these agents once or twice at the outset for their emetic effect, I am not favorable to their repeated administration. Being powerfully depressant, patients kept under their influence rapidly lose strength, and I doubt if their local action is better than that of lighter

emetics, such as ipecac and alum, and the sulphates of copper and zinc. My preference is for the wine or syrup of ipecac, repeated whenever it becomes necessary to produce emesis. A teaspoonful of powdered alum mixed with honey or syrup is an old and still popular remedy. Very many physicians rely wholly on the sulphate of copper as an emetic. With the act of vomiting some secretion is carried from the larynx and trachea; perhaps pieces and casts of false membrane are thrown out, and considerable relief follows, but it is seldom permanent. Before long, in most cases, the dyspnoea again becomes urgent, driving us back to emetic treatment.

Towards the end, the stomach responds less readily to emetics, because, as I suppose, the functions of the nervous system are in abeyance. I have seen large quantities of nauseants given in the last stages of croup without result.

I had almost forgotten to say that apomorphia has gained some favor as a prompt and non-depressing emetic. As little as .0015 gramme, or the fortieth of a grain, hypodermically, will effect the object.

Because emetics bring some relief to urgent symptoms, there is a liability to their over-use.

Nothing is gained by keeping a child constantly nauseated; on the other hand, appetite and strength are lost, and rapid prostration ensues.

Aside from favoring the secretion of mucus and driving from the windpipe, *occasionally*, the accumulated products of the inflammation, I doubt if anything is to be gained by the use of these agents.

Most authors recommend the warm bath early in croup. It reduces the fever, it relaxes the system, and is a reliable adjuvant to the emetic treatment.

Until a recent date, much reliance was placed on mercury as a remedy in membranous laryngitis on the theory that it abated inflammation and promoted the breaking down and liquefaction of the false membrane; it was used early and late in all cases.

This treatment, once so popular, has fallen into comparative disuetude. I must confess that I am not yet convinced of its uselessness, and that I still continue the practice, partly because it has happened to me to see some recoveries under it, and partly because I would not hastily abandon a remedy that has been held to be of the greatest service by many eminent physicians. I do not believe that mercurials have any effect on the already formed membrane, but I am not certain that they may not so modify and lessen the inflammation that the materials for the manufacture of this membrane are no longer furnished.

But if mercury is to be of any use in a disease of such rapidity, no time is to be lost in bringing the system under its influence. Unless we can so give it as to insure prompt action, we had better not give it at all. I like the plan of small doses often administered. From .01 to .03 gramme—

1-6 to $\frac{1}{2}$ grain—of calomel may be placed on the tongue as often as every hour or half hour.

In some cases it becomes necessary to guard against diarrhoea, by the use of Dover's powder. Probably a systemic effect can be secured in this way quite as speedily as by inunction or subcutaneous injection. After a day or two of this frequent dosing, we may properly conclude that something of its constitutional effect has been secured. I would then suspend it for a time, or give it much less frequently.

In all instances where the croup is secondary to or a concomitant of, other diseases, and in feeble children, I think it safer not to give mercury at all. Prof. J. Lewis Smith, in his most excellent work on children's diseases, advises a mixture of chlorate of potassium and muriate of ammonium for these cases, and gives us the following formula :

	Grammes.	
R. Potassii Chlorate.....	4	3 j.
Ammonii Muriat.....	2.6	℥ij.
Syrupi Simp..... fl.	30	℥ij.
Aquæ..... fl.	60	3 ij.

Misce.

R. A teaspoonful or two every half hour or hour.

While you are attending assiduously to the details of medical treatment, you will give some thought to the nourishment of your patient. If, in any acute disorder, support is necessary, it is so here. Probably there is little or no appetite, but the fever creates thirst, which should be assuaged, in part, by milk. Beef-tea and other fluid foods may be given, if desired, but milk is of more value than any of these.

Then as to stimulants, I advise an early resort to them. The labored breathing, the restlessness, and the enforced wakefulness, are so rapidly exhaustive, that they may properly be given from first to last. Do not think that the violence of the laryngo-tracheal inflammation contraindicates their use; on the contrary, it creates a demand for them. Some of the authors tell you that when the heart shows signs of failure, *then* resort to stimulants. But why wait for exhaustion? Why not try to prevent it? If stimulants are adequate to rally from a low condition, may they not, if given in time, forestall that condition? I believe it is proper to begin their use as soon as you feel certain that you have to deal with true croup. They may be given at first in small quantity and at infrequent intervals, but when the disease is as its height and the labor of breathing is great, you may use them with unsparing hand. The disease creates a tolerance of them. A child of from two to four years may take daily anywhere from fifteen to ninety fluid grammes, or from one-half to three ounces, of brandy or whiskey with only benefit.

But statistics are heavily against us in this disease, and it is more than possible that, in spite of our efforts, the condition becomes increasingly unfavorable. It is apparent at length that, without the intervention of surgery, the child must die.

The question of a resort to tracheotomy then presents itself and must be promptly decided.

Tracheotomy does not cure croup; it simply admits air to the windpipe below the point of obstruction. With time thus gained, the laryngeal inflammation *may* subside and the patient recover.

The death-rate having been high, the operation has never been a popular one, but it should be remembered that the mortality has been in spite of the operation, not because of it. As it is never entered upon until death seems to be inevitable without it, and as its performance under ether or chloroform is painless, I think we might well resort to it more frequently than we do.

Reports from some public institutions are quite in its favor. Of ninety tracheotomies in the children's hospital at Prague, nearly thirty-five per cent. were followed by recovery. This is a better showing, however, than most other institutions make, and far more favorable than statistics from private practice.

Age has its bearing on the success of the operation. The older the child, the better is its chance, because, mainly, the trachea and larynx are more developed. Under two years of age failure is the rule, though, like many rules in medicine, subject to exceptions.

There is a proper time in the progress of the disease for operating. You will be in little danger of resorting to surgery while there are still hopes of success through medical means. There is more danger of procrastinating until the patient is moribund. This mistake, has, I think, been sometimes made. As soon as lividity of the lips and fingertips shows that the blood is becoming surcharged with carbonic acid, then, and not much later, is the time for tracheotomy.

The probabilities of recovery after the operation are much lessened if there is coexistent bronchitis or pneumonitis; and, unhappily, one or the other is often present. Not only that; these diseases are often consecutive to the tracheotomy, and, in case of death, are prime factors in its causation.

To prevent the occurrence of these pulmonary troubles after the operation, attention must be given to the temperature and humidity of the air to be inspired. Since it is no longer warmed by passing through the nose and mouth, it should be warmed artificially from 85° to 93° Fahr.

A competent nurse should be constantly at hand, by night as well as by day, to regulate the temperature, to give necessary attention to the tube, and to administer proper nourishment at proper times. The difficulty of obtaining such help at an hour's notice constitutes one reason why tracheotomy in private practice compares unfavorably with the same operation in public institutions.—*Phil. Med. News.*

QUININE ENEMATA.

In a lecture on the treatment of malarial fever, published in the *Detroit Lancet*, Dr. Alonzo

Clark, of New York, with regard to the methods of administration, observes :

I have not become a lover of the hypodermic injection of quinine, for it so very generally has made sores in instances where I have seen it used. If the druggist can prepare it in such a way that there will be no irritation I would be less inclined to object to it ; but I know it is effectually administered by injection into the bowel, and given in this manner it acts, at least, in an innocent way. But it must be given in large doses to be effective. The doses that were employed four or five years ago would seem only to inflame the fever and not to reduce the temperature. It must be used in ten grain doses, three times a day, and you will find that injecting it into the bowel will be just as efficacious as if it were taken by the mouth. The old account of the matter was that a double dose should be given when the medicine should be administered by injection. I do not think so, and I feel quite sure that I can make five or ten grains of quinine, properly dissolved, do just as much for the general system, when injected into the bowel as if it were taken into the stomach. It may not be true of a large circle of medicines, but I am confident that it is of this.—*Med. and Surg. Reporter*.

ON THE USE OF CHIAN TURPENTINE IN CANCER.

By Professor JOHN CLAY, Obstetric Surgeon to the Queen's Hospital, Birmingham.

More than two years have elapsed since I commenced treating cancer of the female generative organs with Chian turpentine. By the courtesy of the conductors of *The Lancet* the results of my first experiments were published in the number for June, 1880. The paper attracted considerable attention, both professional and general, and provoked much adverse criticism ; indeed in certain quarters this plan of treating cancer of the uterus in particular was declared useless. An enlarged experience, however, has confirmed the statements made in my original paper, and I have now the satisfaction of being able to declare that I have nothing to withdraw or to qualify as regards the statements I then made, as the result of observation, as to the effects of Chian turpentine in uterine cancer. I should be glad to confirm these conclusions by now publishing a number of illustrative cases showing the treatment pursued in different forms of uterine cancer, but consideration of the space at my disposal obliges me to be content with describing briefly the conditions under which a measure of success may be obtained, and the opprobrium of the alleged uselessness of the remedy may thus be removed, to the ultimate benefit of suffering humanity. It appears, therefore, necessary to determine whether Chian turpentine does actually alleviate the distress of cancer or has any controlling influence upon the progress

of the disease, or any pretensions to effect its cure. It is obvious that if either or all of these results can be secured by the use of the drug, in any form or situation of cancer, the remedy cannot be deemed useless. Now, the facts within my own knowledge, derived from my own professional experience, may be summed up as follows : Nine cases of cancer confined to the uterus, which have been under treatment for about twelve months, are so far convalescent that they are no longer under observation. The cancerous growths have disappeared, there is no bleeding on manipulation, and the parts are smooth to the touch, and appear to be covered with mucous membrane. In most of the cases the cervix uteri is shortened from the contraction consequent on the removal of the growth. A number of cases of uterine cancer in private and hospital practice are under treatment, in which freedom from pain, diminution of hæmorrhage, and sloughing of the growth, with improvement of the general health, are prominent features. A number of advanced cases of uterine cancer have been treated for a short time, and the patients have died, but an amelioration of the more severe symptoms took place, although the patients succumbed to the anæmia produced by the previous exhausting discharges. The disappearance of the cancerous growth was verified in three cases where an examination was made after death. One case was complicated with cystic disease of each ovary, one died from dysentery, and in the other the glands in the pelvis and abdomen were extensively diseased. In neither of the fatal cases where the remedy had been exhibited for some time were there any fistulous communications with the rectum or bladder. If we bear in mind the progressive and generally rapid advance of the disease when left alone—as it rarely disappears spontaneously—or when it is treated by palliatives, and compare this with the treatment by Chian turpentine, we find in the latter method a gradual subsidence of the disease, varying as to length of time in proportion to the more solid consistence of the growth, a marked diminution of pain, a lessening of the hæmorrhage, with an increase of the muco-purulent discharge. There is usually an improvement in the general health, but an increased tendency to anæmia is sometimes noticed. From a review of all the cases I have observed, it may be safely asserted that the effects of Chian turpentine in cancer of the uterus are tolerably uniform, and it is more than probable that the remedy effectually removes the cancerous infiltration surrounding the original growth, thereby preventing the extension of the disease. In some instances the treatment has removed glandular complications, and in others it is presumable that these have been averted. It is this controlling action of the drug which probably causes the abatement of the pain and hæmorrhage. The growth gradually diminishes in size, becoming loose and shrivelled, and losing its firm and succulent condition. Whatever may be the termin-

ation of the case, the treatment manifestly affords to the patient such comfort as is not obtainable by any other therapeutical measure.

The earlier the cancerous disease comes under treatment, the greater is the prospect of ultimate relief. The success obtained in recent cases is probably owing to the patients coming under observation before any apparent extension of the disease, or before vital organs are involved. Where the vagina is affected with the disease primarily or secondarily, particularly the latter, the prospects of relief are materially reduced. The treatment should be prosecuted vigorously and persistently, especially at the outset, so as to minimize the constitutional effects of the disease, as it is difficult to decide in what stage these are developed, and perseverance with the treatment should be strenuously encouraged by the medical attendant, as otherwise the patient may be left to die unaided by the only drug that has been found by its internal administration to have any pretensions to resolve a cancerous growth.

In treating a case of cancer of the uterus or rectum, the following procedure is recommended for adoption. It may be premised that it is essential that the genuine drug only should be administered. It is a humiliating statement to make that even now some houses are supplying and dispensing other turpentine for Chian turpentine, and are even guaranteeing the genuineness of the article they supply. It is also necessary that the drug should be given in the form which is most convenient for assimilation. The essence of Chian turpentine, prepared by Messrs. Southall & Barclay, of Birmingham, appears to me to be the most suitable preparation. This is prepared without the sulphur, and evidently does not contain any ether. The drug is in a state of minute supervision, is easily digestible, suitable for all forms and situations of cancer, and is very palatable. One teaspoonful of the essence contains three grains of the turpentine. In place of the sulphur in the essence, Messrs. Southall prepare pills which contain sulphur, sulphate of copper, etc., and which they style, "pil. sulph. comp.," to distinguish them from the Chian turpentine pills. Two teaspoonfuls of the essence, with one or two of the compound sulphur pills, should be given three or four times a day, and after the medicine has been taken for about three months it should be omitted for about three days in every fortnight. The pills or mixture, prepared according to the original formula, may be given instead of the essence and sulphur pills.

The vagina and rectum, even from the first, should be syringed daily with equal parts of vinegar and water. After allowing time for this to drain from the parts, it is advisable to insufflate into the vagina or rectum about ten grains of the following powder: Tannic acid half an ounce, powdered charcoal two drachms, and powdered sulphate of copper ten grains. Messrs. Mappin & Co. of New-street, Birmingham, make a vaginal

insufflator by which the powder may be introduced into the rectum or vagina very efficiently. An insufflator may be improvised out of a vulcanite tube and a two-ounce india-rubber bottle connected with elastic tubing, but such an instrument is apt to become moistened by the secretions, and thus prevent the powder from becoming properly placed. The propriety of excising the os uteri in epithelioma of this part, as a preliminary procedure to the use of the Chian turpentine, may be questioned on reasonable grounds. The cancerous growth as it disappears under the Chian turpentine treatment leaves a shortening of the os uteri which brings the external rim of the os uteri into close proximity with the bladder and rectum, so that if the vaginal portion of the uterus has been removed the subsequent contraction of the lower portion of the uterus drags on the rectum and bladder, causing great pain, with rectal and especially vesical troubles. In large pedunculated epithelioma of the os uteri the larger portion of it is perhaps best removed, taking care to leave the normal uterine tissue intact. In cases where the turpentine has been taken for some months, the dull curette may be used to remove the sloughing mass with advantage. When pain in the sacral or hypogastric regions comes on after the treatment has been pursued for two or three months, the use of morphia suppositories is indicated. To avoid the habitual use of opium, the tincture of Jamaica dogwood (Christy's), in one drachm doses once or twice during the evening, may be prescribed. Hæmorrhage at the monthly periods is best met by giving the liquid extract of ergot in ten or fifteen-minim doses (which may be added to the essence of Chian turpentine), and to use locally the perchloride of iron in solution, or the dried persulphate of iron by means of insufflation. Diarrhoea and dysentery sometimes supervene during the treatment, for which the oil of eucalyptus globulus (in five-minim doses three times daily for a few days only) is a good remedy. This drug may be added to the essence of Chian turpentine. Anæmia consequent upon the occasional hæmorrhages and serous discharges is a serious complication; much of the local treatment here recommended has been suggested to anticipate or prevent the anæmia. To combat this condition, Fellows' syrup of the hypophosphites, in one-drachm doses, may be given during meals, from the commencement of the treatment, in connection with the Chian turpentine treatment.

In cancer of the vulva, Chian turpentine acts slowly, and as the disease frequently extends rapidly, an early excision of the growth, if possible, is necessary, the remedy being given for some time afterwards with a view to prevent a recurrence of the disease.

The use of Chian turpentine in a large number of cases of cancer of the breast shows that it is a remedy of considerable power in relieving pain, of diminishing the size of the growth by causing the removal of the cancerous infiltration, leaving the

more permanent fibrous stroma to be subsequently dealt with. In many instances the growth, although at first it was firm, and seemingly adherent to the chest walls, has become loose and easily movable from side to side, as if it were merely a foreign body, so that if an incision had been made in the skin it could have been pushed out. Several cases of primary scirrhus of the breast have been noticed in which after the administration of the Chian turpentine for some months, the whole of the cancerous mass has sloughed away, appearing as a black gangrenous mass leaving a cavity of considerable dimensions, the walls of which were composed of healthy tissue, and the wound healed with comparative rapidity by granulation. This process, however, is a slow and painful one, and suggests the propriety of anticipating the sloughing process by removing the growth with the knife after it has become sufficiently detached from the surrounding structures by the treatment. Several cases treated by this method have done well, the operation has been materially simplified, and, if the remedy is administered for some time after the operation, the experience gained shows that there is not much likelihood of a recurrence of the disease. In recurrent cancer of the breast the remedy is often found to be of great benefit, and after it has been given for some weeks the application of the crystals of resorcin to the growth facilitates the disintegration of the mass. Resorcin is a powerful and at first a painless application. When its use is attended with much pain it may be mixed with equal portions of tannic acid and charcoal with good effect. Vaseline or chrisma dressing is all that is required after the application of the powder.

In epithelioma of the face and other parts of the cutaneous surface the use of Chian turpentine in conjunction with the powder previously advised (when stating the local treatment of cancer of the uterus), to which three drachms of resorcin have been added, very good results have been obtained. In two cases of cancer of the stomach very beneficial results have accrued from the special treatment. In cancer of the mouth and tongue the results have not been so good, in consequence of the rapidity with which the neighboring glands became involved in the cancerous disease.

I leave these necessarily incomplete observations to the impartial critical judgment of the profession. Enough, I trust, has been stated to show that the Chian turpentine treatment has some ameliorating influence on cancerous disease—how much the future must determine—and therefore I am enabled to claim that the remedy is far from being useless. The facts stated may be considered at least as a distinct addition to our existing stock of knowledge in the treatment of cancer, and I look forward as the almost certain result to their being confirmed, and to candid inquiry leading to further improvements in the same direction.—*London Lancet.*

OBSERVATIONS ON EXAMINATIONS FOR THE TUBE-CASTS OF BRIGHT'S DISEASE.

Read before the Clinical Section of the Philadelphia County Medical Society, January 31, 1882, by Jos. G. RICHARDSON, M.D., Professor of Hygiene and Demonstrator of Histology in the University of Pennsylvania.

Mr. President and Fellow-Members of the County Medical Society,—I feel almost as if I owed you an apology in advance for attempting to interest you in the subject of the tube-casts of Bright's disease, and my justification is that our energetic Committee on Clinical Pathology has laid it upon me as a duty, with such urgency that I felt bound not to refuse to do my best towards making a few remarks upon this subject not absolutely wearisome.

Of course I need only just remind such an audience as I see before me that tube-casts are solid cylinders formed in the uriniferous tubules of the kidneys during the course of certain acute maladies, such as diphtheria, scarlatina, typhoid fever, or yellow fever, and in the group of more chronic renal affections entitled generically Bright's diseases. These casts differ in size, structure, and general appearance, and constitute, I think, very important aids in recognizing the form and stage of Bright's disease. Their diagnostic value has lately been contested by the famous French authority, Prof. Charcot, and by others, but for reasons which I shall give you presently I think these gentlemen are mistaken in their opinion.

The first specimen I have to submit to your inspection is a section of gouty kidney, beautifully double-stained by my friend Dr. Geo. A. Piersol, which shows numerous casts filling the calibre of uriniferous tubules, and so obstructing them that little or no urine could pass, thus contributing in a purely mechanical manner to the scanty flow of the renal secretion which often occurs in Bright's disease.

There may also be seen a contracted Malpighian corpuscle, the vastly thickened wall of which displays the fibrinous exudation it contains, stained the exact blue tint of the tube-casts which plug the uriniferous tubules. Specimen No. 2 exhibits "small hyaline tube-casts." No. 3, "pale and dark granular tube-casts." No. 4, "epithelial tube-casts." No. 5, "large waxy tube-casts," some three-hundredth of an inch in diameter. No. 7, "granular cast, with pus-corpuscles attached."

The search after tube-casts should be much more thorough than is generally made, and frequently a half-hour's examination will be rewarded with but one or two faint hyaline casts. I have found tube-casts abundant in the urine of a patient with diphtheria two days after the commencement of the attack, so that they do, sometimes at least, give us very prompt warning of the onset of disease. Including a case now under my care, in

which the diagnosis is not positively established, I have seen three cases of Bright's disease in which I detected casts, whilst there was absolutely no albumen in the renal secretion.

The exact diagnostic value of the tube-casts in any particular instance must be determined by a careful consideration of the history, inherited tendencies, general symptoms, etc., as pointed out in the standard text-books upon the subject.

The new points to which I ask your attention may seem at first sight too insignificant to be worthy of notice, yet I venture to submit them, because, when combined with other little facts, resulting from your own experience, or that of our professional brethren elsewhere, they may contribute to the advancement of true medical science, for which we are all laboring so earnestly.

First, in regard to mucous casts, which often puzzle or actually mislead beginners in microscopy: these are long, often branched, rarely epithelial in their character, but sometimes having leucocytes attached to their surfaces. In my experience they generally shrink up in the acetate of potash solution, and this may be recommended as a diagnostic test for them. As they are apt to appear in cases of irritation of the bladder, it has occurred to me that they may proceed, when found in the urine of male patients, from the ducts and follicles of the prostate gland and perhaps of the urethral glands.

Second, I propose the use of osmic acid to demonstrate the existence of slight fatty degeneration in cells of renal epithelium attached to "epithelial casts," also the employment of aniline solution to bring into view very faint and doubtful "hyaline casts," which might otherwise escape observation.

Third, I claim that we can, by a careful consideration of the number of the empty "cell-walls" of red blood-corpuscles attached to the various forms of tube-casts, gain important information occasionally as to the activity of the renal congestion in Bright's disease (see *American Journal of the Medical Sciences*, January, 1870).

Fourth, it seems probable that many cases of Bright's disease escape detection every year, simply because no microscope is convenient, at least until after putrefaction renders the examination difficult or unreliable. I, therefore, invite attention again to my method of preserving tube-casts, and advise that in every instance of possible renal disease, where a thorough investigation is not made at once, a couple of fluid drachms of the sediment from the urine should be poured into a small vial containing about an equal bulk of dry acetate of potash, which will perfectly preserve tube-casts, if it happen to contain any, for careful study at any future time.

Fifth, having observed that many tube-casts in the urine of yellow-fever patients are made up partly or wholly of fungous spores (micrococci), and also that the kidneys of some persons dying of yellow fever had their uriniferous tubules generally obstructed by plugs of micrococcus, I advanced the theory at Richmond in 1878 that the suppression

of urine so common in fatal cases of yellow fever was more or less mechanically due to this occlusion of the renal tubules. Such a doctrine was rendered highly probable by the observations of Prof. Orth, and gains additional confirmation from the recent very important investigations of Prof. H. C. Wood and Dr. Formad upon diphtheria.

Lastly, believing as I do that some light may be thrown upon nearly one-half of our cases in general practice by microscopic examination of the urine, sputum, blood, etc., and that therefore no physician can honestly do his whole duty to his patients without frequent resort to Medical Microscopy, I urge that every practitioner of medicine should, in default of a better instrument, provide himself with one of Beck's little ten dollar microscopes, which, as I show you here, will display even "pale granular tube-casts" with distinctness. Perhaps this recommendation will be severely criticised, but my excuse for making it is that it is better to discharge a duty imperfectly than to neglect it utterly, and also that every doctor who has once found out how much assistance even such a feeble aid gives him in his practice will very soon resolve to benefit himself and his patients by procuring a good microscope, although he may at first be compelled to borrow the money to pay for it.—*Phil. Med. Times*.

SCENTED IODOFORM POWDERS FOR THE EAR.

*Read before the Philadelphia County Medical Society,
November 10, 1881,*

By CHARLES H. BURNETT, M.D.

Iodoform is stimulant and anæsthetic, and has long been recommended as a local remedy in chronic inflammations of the middle and external ear, attended by discharge from the meatus. Its formula is CHI_3 ; it belongs to the methyl compounds; contains ninety-six per cent. of iodide by weight; when heated it will liberate iodine and hydriodic acid, and when only exposed without heat it will volatilize slowly, and to this volatilization is due the unpleasant odor. It is doubtless a useful remedy, especially in chronic purulent inflammation of the drum cavity; but the odor of the drug, unpleasant alike to physician and patient and to their respective families, has well-nigh banished it from aural practice. To the writer it is not unpleasant; but so nauseous is its odor to most persons that positive injunctions not to use it have been laid on the surgeon by the patient's family. In order not to lose this beneficial aid from my armamentarium, it has occurred to me to have the iodoform scented with some of the essential oils, balsams, etc., for use in the ear, as has been done by others in ointments containing iodoform to be applied to other parts of the body. Therefore, through the kindness of Mr. Charles

P. Stout, of H. C. Blair's Sons, Eighteenth and Chestnut Streets, in this city, I have had made a number of combinations of iodoform and scents, and in two instances the combinations have been such as to deodorize in a measure the iodoform by forming another, but highly useful, compound, as will be shown later.

These powders are composed as follows :

1. Iodoform, gr. xx ;
Ol. menth. pip., Miv.
2. Iodoform, gr. xx ;
Ol. gaultheriæ, Mii.
3. Iodoform, gr. xx ;
Ol. amygd. amar., Mii.
4. Iodoform, gr. xx ;
Ol. lavandulæ, gtt. ii.
- *5. Iodoform, 3 i ;
Tr. dipteris odorat., f 3 ij.
6. Iodoform, gr. xx ;
Ol. menth. pip.,
Ol. lavandulæ, aa Mj.
7. Iodoform, gr. xxx ;
Ol. amygd. amar.,
Ol. lavandul. flor.,
Ol. menth. pip., aa gt. i.
8. Iodoform, 3 j ;
Bals. Peruvian., gr. iij.
9. Iodoform, gr. xx ;
Tannin, gr. x.

By thus scenting the iodoform its use is rendered more agreeable, and in the combinations with the non-oxygenated essential oils, like lavender oil or any of the turpentine series, there is probably obtained a good result in the diseased ear by the oxygenation of the essential oil, since in such oxygenation ozone is said to be generated, and this acts as a disinfectant and an antiseptic. As it is asserted that the exhaled odor of cut flowers in a bouquet produces ozone and makes them beneficial in a sickroom, it would seem likely that the exhalation and oxygenation of an essential oil might produce a similar result in a diseased cavity like the ear. On this point, however, it is desirable to hear from the chemists present.

In the case of iodoform combined with tannin, and in the combination with Peruvian balsam, the iodoform is very slowly broken up, and there is formed an iodide of tannin. This prevents volatilization of iodine, and diminishes the odor. Thus in the same powder we have the iodide of tannin, tannin, and iodoform. This powder not only smells the least, but is one of the most efficient in

its healing power. The powder composed of iodoform and Peruvian balsam has the advantage of an agreeable odor, and of possessing at the same time a larger proportion of iodoform than the combination between this drug and tannin, as it requires but little Peruvian balsam to impart the pleasant odor to the mixture. I have used this particular powder, and that composed of iodoform and tannin, with so much satisfaction that to these two I give the preference as iodoform powders for the ear.

In regard to the others, it may be said that they possess all the virtues of iodoform, but, owing to the rapid evaporation of the essential oils, they ultimately possess the characteristic smell, excepting just at the moment of using them, nearly as much as pure iodoform.

All of the powders may be applied to the ear by blowing them in with a small powder-blower, or they may be carried in by means of cotton rolled on the end of a dentist's cotton-holder under perfect illumination of the auditory canal and the drum-cavity by means of the forehead mirror. These and all other medicaments are worse than useless if applied to a running ear by means of cotton, which is allowed to remain even for a short time in the canal, because the discharges are thus retained, maceration brought about, granulations favored, and foulness of the ear certainly produced.

So far as iodoform is concerned in diseased ears, it is best applied so as to produce at most but a thin film over the ulcerated or inflamed surface ; and this is efficiently accomplished by smearing it on by means of the dossil on the cotton-holder, as already said.—*Phil. Med. Times.*

MERCURY IN THE TREATMENT OF SYPHILIS.

PROF. GEO. HENRY FOX, A.M., M.D.

First.—In the treatment of syphilis mercury is naturally the most valuable curative agent of which we have any knowledge. The positive results which follow its employment are such as to convince any competent observer as to its efficacy.

Second.—Mercury is an overrated remedy. The fact that a remedy will do much is no sign that it will accomplish everything that may be desired of it. It will lessen the manifestations and shorten the natural course of syphilis in most cases, but it will not always produce a speedy and beneficial effect, as most physicians are inclined to believe. Some of the worst cases of syphilis in my practice have occurred in patients to whom I gave mercury for one or two years.

Third.—If the profession generally were more strongly impressed with the great value of hygienic measures in the treatment of syphilis, and were less inclined to confide solely in the specific action of

* After having read this paper, the writer saw in the *Philadelphia Medical Times*, November 19, 1881, that Mosetig, of Vienna, had endeavored to mask the odor of iodoform by Tonka bean, *Dipterix odorata*.

mercury, I am convinced that patients would receive a far greater amount of benefit. Remedial agents often acquire a fictitious value by reason of the fact that patients improve during their administration. We know that mercury is not inert, and have ample proof that it can and does accomplish a great deal. The improvement which takes place in our syphilitic patients when treated is not wholly the effect of mercury. It is due in great measure to the vis medicatrix.

Fourth.—Mercury is not essential to the cure of syphilis. This disease, like other erythemas, tends to run its course. It may be severe, and, in that instance, terminates fatally. In the majority of cases it is a far less malignant disease than it is supposed to be. If the patient is of sound constitution and the infection is mild, it usually runs its course without injuring the health of the patient. It may be said that such patients will suffer more from severe lesions in later years. I believe that these patients are as thoroughly cured as though they had taken mercury. I have seen hale men of advanced years who have had syphilis in their younger days and have received no specific treatment, so that I cannot believe that mercury is essential to the cure of the disease.

Fifth.—The internal administration of mercury is preferable to the inunction, vapor-baths, etc., in every case for the cure of constitutional disease. A somewhat extended trial of mercurial inunction has led me to abandon it. It is but just for me to say that my experience with the vapor-baths and hypodermic injections has been very limited. They possess no advantages over the method of internal treatment which I can recommend, nor can they claim the merit of simplicity.

Sixth.—The dose of mercury usually given to syphilitic patients is unnecessarily large. From the time when the beneficial effect of mercury was estimated by the pints of saliva which dribbled from the patient's mouth, there has been a sudden tendency toward diminution of the dosage of this drug. I believe that in the vast majority of cases the very best effects on syphilis may be obtained by the employment of doses which will not incur the slightest danger of salivation. I have no faith in the administration of doses upon the homœopathic principle. The daily dose of one-half to one grain of the biniodide will do more good than two to three grains. Regarding the choice between metallic mercury and the numerous salts, I am not prepared to speak. The protiodide given in the form of trituration will not cause gastric disturbance. In the late stages of syphilis I have followed the custom of changing from the green to the red iodide. In my own experience, I have never observed any benefits result from the combination of various salts, as recommended by Bumstead, or by the frequent change from one preparation to another.

Seventh.—The duration of mercurial treatment should vary according to the character of the case. There are cases of mild and cases of severe sy-

philis. Mild syphilis does not demand mercurial treatment.

I do protest against treating all cases of syphilis upon a routine plan. Many writers on syphilis lay down the absolute rule that the disease must be treated during a certain specified number of months or years, without even hinting that, for various reasons, one patient may not require as much treatment as another. In our text-books of the present day the description of syphilis rarely corresponds with the average case in practice, but it is the description of the superior and comparatively uncommon forms of the disease. The question is not what the disease is capable of doing, but what it is likely to do. There are cases of syphilis which demand two, three, or perhaps five, years of treatment. But it seems to me to be utterly impossible to fix a certain time as the duration of treatment for all cases. When the early symptoms are slight and disappear under treatment, I deem it quite necessary to continue the use of mercury for two or three years to entirely eradicate the disease and prevent subsequent manifestations. Late lesions of syphilis frequently do occur after prolonged administration of mercury. My own practice is to give mercury in every case during the existence of any symptom of the disease, whether it occurs early or late. In the early period I continue the use of mercury for six months after the last symptom has yielded. I then stop the administration of the drug and await further developments. If the symptoms reappear, I resort again to the use of mercury, and continue for perhaps two or three months after the disappearance of the latest symptoms. In late syphilis I give mercury to subdue any growing symptom and then stop.—*Med. Record.*

ANTISEPTIC INHALATION IN PULMONARY AFFECTIONS.

I. G. Sinclair Coghill, M.D., F.R.C.P. Ed. (*British Med. Journal.*)

The objects of treatment are: 1. To lessen secretions 2. To promote evacuation of what secretion is formed. 3. To disinfect the air which may pass into surrounding or deeper healthy portions of the lungs. Again he says: "Besides acting as disinfectants, antiseptic inhalations promote expectoration by increased energy of expiratory acts. The apparatus is extremely simple. It consists of a space for a pledget of tow or cotton wool, inclosed between the perforated surface of the respirator and an inner perforated plate, which can be raised so as to permit the tow to be saturated with the antiseptic solution. Elastic loops are attached to pass over the ears and retain it in position. The inhaler may be procured either plain or of a slightly smaller size, and covered with black cloth for wearing out of doors. The pledget of tow, which may be changed

once a week or so, sprinkled with from ten to twenty drops of the antiseptic solution from a drop-stoppered vial, twice a day at least, according to the extent to which the inhaling may be carried on. Of this the patient is the best judge, and the length of time and quantity of solution should be regulated by tolerance and effect. The most important times for inhaling are for an hour or so before going to sleep at night, and after the morning expectoration, which leaves the suppurating surface or cavity dry to be acted upon—disinfected, so to speak—by the antiseptic vapor. A great many of my patients have of their own accord come to use the respirator almost continuously day and night from their experience of its good effects. I attach the utmost importance to the mode in which the respiration is conducted while inhaling. The patient should be carefully instructed to respire through the mouth alone, and expire through the nose. In this way the breath is drawn through the saturated tow in the perforated chamber of the inhaler, and passes directly into the lungs laden with the antiseptic materials. Expiring through the nose only, necessarily involves a complete circulation of the medicated air. The breathing should be short at the beginning of the inhalation, but gradually deepened, so as to displace and effect the residual air in the more distant portions of the lungs. This form of respiration itself is not only of great use in favoring the circulation of the blood in the lungs, and thus aiding local and general nutrition through the fluid, but it helps very much the expulsion of the sputa by means of the increased energy and thoroughness of the expiratory acts.

After many trials of the now formidable list of antiseptics, I find that carbolic acid, creosote and iodine, in combination with sulphuric ether and rectified spirits of wine, are the most efficacious and satisfactory. The want of volatility in boracic, salicylic and benzoic acids, and their salts, proves a bar to their employment by this method. Dr. Horace Dobell, who has had a very favorable experience of this treatment, writes to me that he has found thymol, in the form of Shirley's thymoline, very grateful and efficient in many cases where the smell of carbolic acid and creosote was intolerable either to patients or to their friends. Of the three antiseptic agents I chiefly use, I find iodine most useful in the second stage of phthisis, when the expectoration is passing from the glairy into purulent character. I use the tincture for inhaling purposes made with sulphuric ether instead of spirits of wine, and this ethereal solution has a singularly soothing effect on the cough and pulmonary irritation. In combination also with carbolic acid, as carbolized iodine, or iodide phenol, it is extremely useful in the purulent expectoration accompanying the resolution of pneumonia both catarrhal and croupous. In the stage of excavation, whether tubercular or pneumonic, the combination of iodine with carbolic acid and creosote is most potent.

The acid seems to have the greater influence in checking the amount and purulent nature of the sputa; while creosote acts merely as a sedative in the cough, apparently by reducing the irritability of the pulmonary tissues. The addition also of varying proportions of sulphuric ether and chloroform greatly assists in soothing and allaying irritation. These combinations also act frequently like a charm in the profuse expectoration of purulent bronchitis, as also in bronchial asthma.

THE LOCAL APPLICATION OF CHLORAL HYDRATE IN THROAT AFFECTIONS.

In a paper published in the Detroit *Lancet*, for July, 1881, Dr. G. A. Collamore speaks of a species of sore throat, characterized by moderate swelling of the tonsils and adjacent mucous membrane, pain in deglutition, and a peculiar cherry-red or purplish-red hue of the tonsils and pharynx. On the tonsils appear spots of whitish or yellowish white color, the size of a grain of corn or less. These are composed of the aggregated secretions of the tonsillar glands, and are readily detachable, leaving the mucous surface unabraded. There is, moreover, a moderate, sometimes high, grade of fever, and decided prostration of the system. The disease is properly a follicular tonsillitis, though the inflammation is not confined to the tonsillar surfaces, but affects the palatine and pharyngeal mucous membrane also, and is liable to be mistaken for and called diphtheria.

In these cases, combined with systematic remedies, chloral acts in a kindly manner as a local application, either as a gargle, a grain or two to the ounce of water, frequently used, or in a stronger solution applied with a camel's hair brush or a swab. A small quantity of the gargle may be swallowed after each gargling, in order to apply it to the lower pharynx. Employed in this way the author has found chloral a very valuable remedy.

—*Med. and Surg. Reporter.*

HOW TO REMOVE CORNS.

Saturate a small piece of cotton with alcohol, apply it to the corn for a minute, then with a sharp scalpel or knife carefully separate the corn from the healthy tissues, which is easily done by a careful handling of the knife and gentle pulling with forceps, while the parts are being immersed with alcohol. If the alcohol dries away while operating, apply the saturated cotton again, and I frequently find it necessary to apply this several times before the operation is completed. The alcohol not only lessens the sensibility of the parts, but it facilitates the separation of the hard corn from the soft and tender tissues. This cures, and that without drawing a drop of blood or producing any pain, except what results from pulling on the corn with the forceps. After raising one edge, it is about like removing a piece of adhesive plaster.—*American Med. Journal.*

SOME PRACTICAL POINTS IN THE TREATMENT OF HÆMOPTYSIS.

In bringing forward, in a very brief manner, some practical points in relation to this question, I will, for the convenience of the first part of my object, divide cases of hæmoptysis into three kinds : first, the slight ; second, the copious ; and, third, what may be termed the explosive.

In the *slight* form, the basis of the sputum is composed of mucus, which is stained more or less deeply with blood, the bleeding vessel being of small size. The most successful remedy for the this form is ergot.

In the second or *copious* variety, the expectoration consists of pure blood, the quantity of which may vary up to a very large amount ; and the bleeding ceases gradually until the attack is over. Here, again, the most successful remedy is ergot, and indeed it is in this kind of hæmoptysis that ergot is especially efficacious. In order to prove efficient in hæmoptysis, however, ergot must be given boldly. One teaspoonful of the liquid extract is a suitable dose, and it may be ordered every half-hour, hour, or two hours, according to the urgency of the case. If it is doing good, it is a mistake to leave it off before the sputa are bloodless, although the intervals between the doses will be lengthened as the hæmorrhage abates. In a few of these cases, ergot will fail ; not in many, but now and then. If seven or eight doses be ineffectual, it is best to abandon it. The next remedy worthy of confidence is gallic acid, which it is necessary to give freely, in doses of fifteen to twenty grains, at intervals the same as in the case of ergot. Should there be tedious delay in the final clearing up of small traces of blood from the sputa, an acid mixture with quinine is usually effectual ; or, if very obstinate, ipecacuanha, in twenty-minim doses of the wine pushed to slight nausea, will generally remove them.

In the third or *explosive* variety of hæmoptysis, the attacks are profuse, sudden in their onset, all at once ceasing, often for many hours, then abruptly bursting out again. There is no gradual subsidence. The lesion is probably a rupture of some aneurismal sac in the wall of a cavity. Now is it in these cases that ergot is hardly ever of much use. In my experience, the best remedy is turpentine internally, with cold applications over the chest. Three half-drachm doses of oil of turpentine may be given, half an hour apart ; or, if care be taken to follow it with castor-oil, even more than three. When the turpentine is left off, it is well to follow up closely with a mixture of gallic and aromatic sulphuric acids, sulphate of magnesia, and quinine. It is particularly in this type of case that digitalis is often useful for calming vascular excitement. As the patients often make blood very rapidly, the free use of aperients ought to be enjoined.

Nothing would be easier than to quote a long string of remedies for hæmoptysis, but my present object is to leave prominently on the mind one or two that are to be relied upon, and to indicate

their spheres of usefulness. Nor is it necessary to dwell on certain instructions which apply to all forms of blood-spitting. Constipation must go unrelieved, and is best treated by salines. A quick pulse must be steadied by digitalis, of which perhaps the most handy form is the digitaline granule of Homolle and Quevenne. Cough is to be soothed ; the simpler the mode of accomplishing this the better, but it must be done ; and nothing answers better for this than a chloroform pad laid over the sternum.

Speaking in a general way, and not alluding to hæmoptysis of cardiac origin, I hold that we should keep before our minds the advisability of stopping all blood-spitting in phthisis without delay. To this rule, perhaps, there are two exceptions. The first is trivial. It is that dirty-red, slimy, bad smelling, never-abundant expectoration which hysterical women with phthisis often exhibit at the bottoms of their spittoons ; this may be left to itself. The other exception is a serious one ; it comprises those forms of hæmoptysis, usually copious and angry, occurring in advanced and very chronic cases where there is a considerable amount of fibroin induration. In such patients, notable dyspnœa on exertion has for a long time past been a prominent symptom, and respiration has been maintained by a very small extent of lung-substance. These cases are open to a special danger—that of fatal embolism in the right chambers of the heart or the pulmonary artery. Not uncommonly, the course followed is for the bleeding gradually to abate in quantity, remaining, nevertheless, of the same angry red ; then urgent dyspnœa suddenly sets in, and death takes place within forty-eight hours. These are cases calling for extremely careful treatment. Can it be right, where only a small surface is available for respiratory function, to contract those few vessels with ergot ? Or can it be good practice to pass styptic medicines into a patient's circulation when his cachectic state, his low vitality, and perhaps some febrile movement, render him especially liable to the formation of thrombi ? It is wisest to limit ourselves to external applications, chloroform-pads, dry cupping, sinapisms at a distance or other derivative treatment, with appropriate general management.

Perhaps I may be allowed to conclude with two cautions, commonplace they may seem, but both of them the out-come of bedside experience. One is, to have some responsible person in attendance, night and day, on all cases of severe bleeding, till the attack has completely passed away. Death in hæmoptysis is generally sudden, and it is very appalling to discover too late the consequences of omitting this precaution. The other is, to decline positively to examine a patient's chest while there is any hæmoptysis. Irrespectively of the danger of the process, an opinion arrived at by auscultating a chest during or immediately after a bleeding is not a reliable one.—Jas. M. Williamson, M.D., *British Medical Journal*.

REMARKS ON THE USE OF ICE IN THE PREVENTION OF MAMMARY ABSCESS.

Read before the Philadelphia County Medical Society,
January 25, 1882, by M. O'HARA, M.D.

In 1879 I was called to visit a lady entering the eighth month of pregnancy, with a phlegmonous inflammation of the left mammary gland and the surrounding cellular tissue. The cause assigned was a kick of a child which was sleeping on the same bed. There was intense congestion, inflammatory exudation, very great local pain and high constitutional irritation. Fearing premature labor from the severe constitutional disturbance, I exerted speedily all the forces at my command, locally and generally, to abort the inflammation: I used lead-water and laudanum, belladonna, camphor, compression, with aconite, veratrum, and morphia, etc., all without avail. Suppuration ensued, and to relieve tension and agony, the knife was used. Notwithstanding these efforts, premature labor set in, resulting in the successful delivery of a seven-and-a-half-months child. After the incision into the left breast and cellular tissue, both glands took on the secretion of milk, but a mammary fistula occurred, which was so annoying, by the copiousness of the discharge, as to prevent the lady from resuming her household duties. Everything was used, of special or general value, to reduce the secretion of milk and to permit the closure of the fistula, such as iodides, bromides, belladonna, salines, pressure, etc., but all to no purpose. In the third month of lactation rigid dieting lessened the distention and fullness of the breast by reducing the whole amount of the circulating fluid, and the fistula closed naturally. The child nursed thereafter at both breasts and thrived vigorously. The father insisted several times that the child should be weaned, in order to relieve the mother of the soaking of milk about her clothes; but, as the child was puny and undeveloped, and the heat of summer was extreme, I considered it criminal to deny the child the mother's milk: therefore I tried various means to dry up the left breast and leave the right intact; but the effort did not succeed. I thought then that I could not dry up one breast without at the same time arresting the secretion in the other, but I offered to try it with the ice-bag, which was refused; luckily, by low diet, at somewhat of a risk, though, I accomplished the purpose. I have thought often, since that time, that, following the practice of Dr. Corson, I could have averted the whole trouble and pain, and have permitted the patient to recover speedily from the traumatic mammary inflammation, by a speedy use of the ice-bag.

In the same year, Mrs. ——— was delivered at full term of a healthy boy. The nurse was an old family attendant, who by her care of the breasts of females intrusted to her previous to labor could almost warrant that they would never have a

gathered breast. She had had the breast in training for some time. Both breasts gave milk, but not in a very satisfactory manner to the child, for two or three weeks. There was no healthy-shaped conical nipple to either. I expressed my anticipation of a mammary abscess from want of free flow of the milk, due to the condition of the left nipple, some abnormal development of the nipple and some of its outlet tubes, resulting in backward distention of the lobules, milk-accumulation and inflammatory irritation in the milk-reservoirs, then extension to the cellular tissue, and abscess. The larger portion of the gland was thus affected, and there was no option but an artificial opening; due drainage, and the non-use of the organ, set that breast all right.

The right breast had a very small nipple jammed in the breast in a hollow, and somewhat turned upon itself. I kept the baby on this breast for several days. The lower half of the milk-ducts gave milk, but the upper half did not. There was a lump to be felt on the upper portion of the breast, which was a distended lobule or lobules corresponding to the excretory ducts which were occluded. As the breast became distended, signs of suppurative inflammation occurred in this; and two weeks after the other breast was lanced, this one had to be relieved in the same manner, and both breasts became *functus officio*.

I believe the trouble in the right breast might not have amounted to an abscess but for the extra filling by reason of the cessation of the function in the left. I saw that some of the tubes were not open or not allowing an outflow of milk; but, being filled with milk, the additional afflux of blood seemed so to congest the erectile tissue about the nipple as when in a state of erection to kink up and prevent other excretory ducts from emitting their contents, and distention of the lobules was of course imperative. I may say here that I tried by shields and traction to modify the condition of the nipple, not using any violence, but concluded there was some abnormal condition of the nipple and tubes, whether congenital or acquired. In this case I should fear the same condition would be gone over again, if proper means were not taken during the pregnancy to develop the nipple, and, failing that, to forbid the use of the breast. One might be tempted, in the interests of the child, to get as much use as possible of the breasts, and depend on the ice-bag, which I believe could be successfully used at the moment of imminent signs of suppuration occurring. I feel warranted in saying this by my experience in the next case to be related.

I attended Mrs. O'C. three years ago. She had a typically normal left breast and nipple, but the right nipple was flat, depressed, and distorted. The child did not care to use this breast, and no amount of pulling out or countersinking the nipple with a shield could bring it out. Neither could it be freed by the pump, which, when used, gave very much pain. Gradually, from the distorted,

kinked, or strictured nipple-tubes, milk-accumulation, inflammatory irritation, and mammary abscess occurred. She suffered some weeks of agony, which I desired to spare her by an early incision, which she refused until it pointed, when I opened it. She had a tedious recovery from the agony and prolonged drain of pus, and the breast was left damaged considerably, and also a much worse nipple was left.

She was confined again four months ago. The day after the birth she told me she wanted no more gathered breasts. I examined the damaged breast. It showed above nipple a veteran scar, was cocked upward, and promised no future as a nursing organ. The other breast was good. That belonged to the child, and I had no right to meddle with it. Yet even now the right breast was painful and swollen, with pain felt in the arms and under the clavicles. I told her my idea was that I could not keep the left breast for the baby; that I must dry up both. She said I must do it, for doctors must have some means of doing anything they wanted.

It then occurred to me to try the ice. I put on a circular plaster of the india-rubber combination of extract of belladonna, with a hole cut through which the nipple protruded. I filled a thin rubber bag with ice, and gave directions to keep it constantly applied. She kept it constantly applied, not always on one spot, but changing it from the upper part of the breast to the lower, sometimes towards the clavicle, and sometimes on the side of the chest. She shifted it from the breast to the contiguous territory, admonished to change it by her own desire of relief from pain, which would recur in various parts around as the inflammation attempted to pursue its course. She seemed to understand that the breast was furnished with its blood from many arterial branches, and when the irritation from one region was subdued, had to get at another. The application of the ice-bag was immediately followed by a relief of pain, and she was enthusiastic in its praises. It was kept in use night and day for six days. On the third day the milk came in the other breast, and the baby has used it from that day to the present. There was no interference with the general system, except favorably, in abating the rather high constitutional irritation due to the mastitis of the right breast.

On the fourth day she complained of severe local peritonitis. She had been kicked by her elder child in the abdomen, and the inflammation appeared to localize itself in the broad ligaments. The use of morphia, leeching to twelve ounces, and the use of the ice-bag to the abdomen, relieved this feature in twenty-four hours.

On the sixth day the breast presented the appearance in size and to touch of the same organ prior to pregnancy, and there has been no complaint of it since.

There was much interference by officious neighbors, who told them the ice had caused the peritonitis, but the patient bravely held on to it, and

the ice-bag has won a victory in that neighborhood. I wondered that it produced so little disturbance to the organism, and I began to think that Dr. Hiram Corson was not over-enthusiastic in his statements as to its virtue in the prevention of mammary abscess and even arresting the process of suppuration. I think it ought to be more in use in the prevention and cure of inflammations of the breast.

Dr. Goodell read Dr. Corson's paper before the Philadelphia Obstetrical Society, November 4, 1880, and it is reported in the Proceedings of the Society for that year. He has used ice for mammary abscess for many years. It appeared from the debate upon his paper at that time to be unknown as a mode of treatment to Philadelphia physicians then present. The causes of mammary abscess are numerous, and I have not gone into them. Dr. Corson has given many, but neither he nor the members of the Society in that debate appear to have spoken of the cases dependent upon obstructed nipple-ducts or deformed nipples. Dr. Ingham expressed the opinion "that mammary abscess is undoubtedly generally the result of fissured nipple." I have seen very many cases of fissured nipple without this result, and if you get a normal breast and well constructed in its delivery-tubes you can often treat fissure successfully. But you will hardly escape abscess in the cases alluded to in this paper.

"Byford, in his 'Diseases and Accidents incident to Women,' says, 'Anatomical causes of inflammation of the breast exist to a great extent. They are sometimes congenital, sometimes hereditary, but I think for the most part brought about by improper dressing. The flat, undeveloped, or retarded nipple is one form which prevents the perfect performance of suckling. Nursing is often impracticable.' He speaks of a very broad but extremely short nipple entirely too large for a child's mouth and too short for prehension; another, a breast with scarcely a trace of the peculiar warty tissue-like nipple; another, a very small nipple, where the milk-tubes seem to be bound in such a contracted bundle as not to allow free egress to the milk. He mentions a type in which I would place my second case (the right breast), a nipple large enough to be easily taken by the child and drawn, but the milk-tubes on entering turn too acute an angle, and a little swelling of the sub-areolar tissue from the retention of the milk will stop them entirely, so that the milk will not pass out, and if the gland continues in full function we must have inflammation and abscess. It would be interesting to discuss whether these are rudimentary nipples or due to tight lacing and the faults of female clothing, and whether physicians ought not to teach patients how to avoid them if preventible. If anything can be done for the improvement of the defective organ, it must be during the pregnancy. It is too late to do anything after the labor. On this I should like to hear the experience of others.

If we do try after the gland is in function and

fail, we have no right to be censured, and shall not be, if we explain correctly to the patients, and, seeing the storm coming, we can, I think, by the use of ice prevent an abscess from this cause or other causes.

My experience of ice only goes to preventing abscess by drying up the breast. We are not allowed to try many experiments on our patients, yet I think it would be very judicious treatment to use coils of india-rubber tubing, with a constant current of water of the temperature we choose, and draw the line exactly by experience between due physiological and pathological congestion of the breast, and not as in these cases I have referred to, where from necessity we are forced to annul the function of lactation; for when we determine that the nipple is useless the woman ought not to be compelled to go through the agony of a gathered breast.

The time allowed me is so short that I cannot quote from Dr. Corson, but I must notice a criticism of Dr. Corson's treatment, by Dr. G. B. Fundenberg.* He says that, for various reasons, he considers other measures preferable, especially the use of belladonna and pressure. Pressure is the prime factor, belladonna the auxiliary. By pressure, "a tight body" compressing both breasts for forty-eight hours, and the use of 3 ij of extract of belladonna to 3 ss of glycerin, he reports successful results. Now, I have tried compression in many cases with belladonna, and there is no comparison between the two modes of treatment. I have not the slightest faith in belladonna in any shape in a severe form of mammary inflammation, and in future will have no reliance on it. This is the result of experience in these cases just mentioned and many others. It will do in mild cases, but they would probably get along as well by themselves. But as Dr. F. speaks of compression, that is serviceable. And where can you get better means of compression than ice? Ice carries its compressing power deep into every cell and every fibre of the tissue; compression otherwise is only superficial, and cannot go to the intimate depths of every little cell. Compression will not act on the afflux of blood; ice will. Compression is painful; ice is anæsthetic. The sensation is blunted and pain relieved; an inflamed breast bears badly compression. Ice constringes everything,—blood-vessel, nerve-fibre, muscle, and cell, wandering or fixed,—and stops the active formation and progression of the leucocytes, and it is a very simple, easy, and efficient mode of compression. I think those who use it freely will accord it the merit of being a perfect agent of pressure.—*Phil. Med. Times.*

EXAMINATION OF CHILDREN.

By W. T. PLANT, M.D., Professor of Diseases of Children, etc., Syracuse University, New York.

For the proper examination of sick children both time and tact are necessary. The work can-

not be forwarded by haste and impatience. It is important, at the outset, to win the confidence and good-will of the little one. If the patient is a stranger and old enough to be observing, be careful how you approach it. "First impressions are lasting." Avoid brusqueness. Better, at first, talk about the child than to it. Get the history of the sickness from the mother, and while receiving that, you may notice the child without seeming to. A trained observer can see a good deal in a short time. The first glance will show whether the child is very ill, and may even indicate the probable character of the ailment. Notice the physiognomy first. The features of a child under three or four months have little expression, but beyond this period they may be taken as an honest declaration of its feelings. It has not yet learned the art of hiding trouble under a tranquil mien. In acute diseases attended with fever the cheeks, and perhaps other parts of the face, are flushed from congestion. If the redness is circumscribed and transient, appearing on one or both cheeks, the forehead or the ears, soon fading into paleness to reappear after an uncertain time, we have in this a reliable sign of serious brain trouble. Drooping of the upper lids, squinting, rolling of the eyeballs, fluctuating or unequal pupils, or a steady gaze on vacancy, associated with fever, are symptoms that point in the same direction. A small, pinched face, overtopped by an enormously enlarged head, characterizes hydrocephalus. Rapid out and in movements of the alæ nasi, with flushed and anxious countenance, attend severe inflammations of the respiratory organs. I know of no disease that will change the physiognomy of a little child so quickly as a diarrhoea, with copious watery dejections. I suppose that full three-fourths of the weight of a child's body is water; and its rapid abstraction by an intestinal flux may, in a few hours, work such changes in a plump and ruddy face that it is scarcely recognizable.

Notice also the voice. You know the clear, ringing, exuberant tones of healthy childhood. In sickness they are changed. Diseases that produce great debility render the voice weak and plaintive. In pneumonitis and peritonitis it is restrained, because its exercise causes pain. Fits of loud crying are evidence of the absence of these diseases. In croup, and other affections of the larynx, the voice is apt to be hoarse and brassy. Hoarseness is also an early sign of congenital syphilis. Some cases of cerebral inflammation are attended by an occasional solitary piercing cry, a cry so peculiarly expressive of agony that it is not easily forgotten. This is the "hydrocephalic cry" of the old authors. Sighing is a symptom frequently seen in like cases.

Cough is very frequent in children, and its character varies with the cause. After taking cold, the most frequent cause, the cough is dry at first from diminution, but becomes moist at length from an increase of bronchial secretion. The cough of pneumonitis and pleuritis is apt to be restrained.

* Pittsburg Medical Journal, October, 1881.

That of whooping-cough is always paroxysmal after the first stage, though the whoop is not always present. The cough that accompanies some forms of heart disease is dry, stuffy, and frequent. A laryngeal cough is peculiarly loud and resonant—clarion-like. Stomach and intestinal irritations, as from worms or undigested food, also cerebral and spinal irritations, often give rise to a persistent, dry cough, from reflex nervous influence. Lastly, continued fevers in children are often attended throughout their course by a hacking cough, difficult to subdue, and more annoying than dangerous.

Notice, again, the position and movements of the patient. If very weak it lies upon its back without much movement of its limbs. If the head is retracted and cannot be brought forward without pain, if the body is rigid, and there are muscular spasms and twitchings, this condition points strongly towards cerebro-spinal irritation or inflammation. If any of the abdominal viscera are inflamed, the child prefers to lie on its back with the limbs drawn up. In colic the prone position is chosen because pressure gives relief. Children often carry the hand to the seat of pain—to the forehead in headache, to the ear in earache, to the gums when teeth are coming. Rubbing the nose and upper lip is popularly regarded as a sign of worms. It may be due to these, or to any other irritant in the alimentary track, to a cold, or a dose of Dover's powders or other opiate. In spinal and hip diseases children instinctively assume positions so characteristic that they are of great diagnostic value. In all conditions of the respiratory organs, in which the need of air is urgently felt, there is apt to be extreme restlessness.

Inspection of the surface of the body will frequently lead to a correct diagnosis without other examination. All the exanthemata may be known in this way. Congenital syphilis is wont to betray itself by coppery discolorations of the surface and eruptions around the anus. In infants the first stage of intermittent fever is seldom attended with shaking, as in older people, but by lividity and paleness of the skin and a characteristic goose-flesh appearance. Jaundice, a frequent ailment in the newly-born, imparts a yellowish tinge to the surface.

In grown people we make much of the pulse; not so with children. It is usually absent at the wrist for a week or ten days after birth, and throughout infancy it is feeble and very rapid. Its average during the first year is about one hundred and thirty (130). It is considerably slower during sleep, and much faster during active movement. Gradually it becomes less rapid, and at the fifth year it is about ninety. During the whole of the child life it remains somewhat faster than in the mature. At puberty it is about eighty. The infant pulse is liable to great acceleration from slight causes. A cold, the coming of a tooth, or any transient emotion of joy or grief, may affect its rate as much as a serious illness. You will natur-

ally infer that a rapid pulse is of little significance in very early life. A preternaturally slow pulse is of more importance, being one of the ordinary accompaniments of serious brain disease. The difficulty of counting the pulse, owing to the incessant movement of children, still further detracts from its value.

The thermometer, an instrument of the greatest value in our work among grown people, is comparatively of little worth when we are dealing with young children. Often the child is refractory and must be held down in order to keep the instrument in the axilla long enough to take the temperature. This is of the less consequence, since its revelations are of much less value than in adults. For, in children, the temperature, like the pulse, is liable to sudden increase from slight and transient causes. A fit indigestion, or even an outburst of anger with hard crying, will cause the temperature to mount to 103° or 104° , and the case might seem to wear a serious aspect; but an emetic or a dose of oil for the indigestion, and such wholesome correction in the other case as shall restore the calmness of an obedient spirit, will soon bring the body heat down to the normal standard. When the thermometer is used, it should be remembered that the temperature of the young child is a little higher than that of mature age, though the difference is but the fraction of a degree.

The respiration in young children differs in some particulars from that of mature age. In the very young infant, the breathing is frequently intermittent and irregular. There may even be pauses of such considerable length between the inspirations that the mother fears the cessation of the function. From an average of about forty respirations per minute, during infancy, the rate decreases as the child grows older. At the tenth year the average is about twenty-two. Like the pulse, the breathing is liable to great disturbance from slightest causes. Exercise, emotional excitement, or a transient fever, may increase it as much as more serious ailments. In capillary bronchitis and pneumonitis the respiration is quickened. In acute pleurisy, and in peritonitis it is short and difficult from the increase of pain to which the movement gives rise. In all acute febrile affections in the young child respiration is apt to be rapid and panting. This, with the cough to which I have before alluded, often renders parents apprehensive of lung disease. In acute encephalic inflammations the respiration as well as the pulse may be abnormally slow and intermittent. In obstructive disease of the larynx and trachea, as croup, inspiration is prolonged, and, if the obstruction is considerable, is accompanied by a peculiar wheezing sound.

In affections of the chest in infants, you will have frequent occasion to resort to auscultation and percussion; and you will be more fortunate than I have been, if, owing to the uneasiness of the child, to the small size of the chest and to the faintness of the respiratory murmur, you do not

fail of that diagnostic precision which is so easy of attainment in the adult. Some things, however, may be learned by these means from the youngest and most refractory patient. We may always know by auscultation whether the lungs are freely and equally pervious to air, and by percussion whether there is any considerable dullness in any part of the chest. If a stethoscope can be used without frightening the child, it is preferable to immediate auscultation, because with it the sounds are collected from a restricted area, while adventitious noises from the nares, the larynx and the stomach are excluded. It is my habit to begin this examination at the back to avoid frightening the child. The young auscultator should have a care not to mistake the naturally harsh breathing of youth for a condition of disease.

While you have been bringing the examination to this point, some chance opportunity of inspecting the tongue and inner side of the mouth has probably presented itself. If not, this part of the investigation had better be made last, since it is pretty likely to provoke crying and a lusty resistance, which occurring earlier would interfere with and retard your work. To examine these organs the patient should be brought in front of a good light. While the nurse holds it and controls its hands, the mouth may be opened by pressing the chin downward. The tongue being in view, notice the condition of its upper surface. If coated, observe the color and depth of the fur, and whether there is any undue prominence of the lingual papillæ. In infants, examine the inner side of the mouth for aphthous sores; also, if at an age when teeth may be coming, pass the index finger backwards over the gums and ascertain their state as to heat and turgescence. If there is ground for the least suspicion of throat trouble, do not neglect to make an examination. This is easily accomplished by steadying the head and passing the handle of a teaspoon over the dorsum of the tongue, nearly as far backwards as the circumvallate papillæ and making downward pressure. —*Obstetric Gazette*.

TREATMENT OF TYPHOID FEVER.

Dr. H. V. Ferrell (*St. Louis Clin. Record*) says: The treatment of typhoid fever is quite satisfactory, the mortality in my experience barely exceeding two per cent. In the treatment there are three fundamental rules to be kept in view.

1. Put the patient to bed early, and enjoin the most absolute rest throughout the whole course of the disease. In all cases of doubt in the diagnosis I advise the patient to take his bed. If it is not typhoid, rest is not apt to hurt him, and if it is, it may be the very means of saving his life. In every one of my fatal cases this rule was not observed. In two cases of death from perforation, one had been about with the fever on him for two weeks, the other three. In the one from hemorrhage, the

young man tried for near three weeks to wear the fever out. I have lost no case where the patient took to bed early.

1. Early and judicious alimentation: by early I mean within the first forty-eight hours. The aliment should be highly nutritious, easily assimilated, in a liquid form, and given at regular intervals.

3. Use drugs only to meet indications, and with a well defined purpose, and no longer than that purpose is subserved. The German specific treatment I believe to be utterly worthless, if not worse. If the temperature runs high, use quinia and digitalis in large doses, sponge the surface freely and frequently with equal parts of whiskey and water, to which may be added a little muriatic acid. To control the bowels and to correct the offensive odor of the discharges, bismuth and carbolic acid, or bismuth and liq. sod. chlorinati. For the vomiting, which is sometimes very troublesome, oxalate of cerium in 10 gr. doses, or calomel in doses of the 1-10 or 1-12 of a grain. For restlessness or sleeplessness, codeia has answered my purpose best. For intestinal hemorrhage, hypodermic injections of ergotine, or what answers just as well Squibbs' Fluid Extract of Ergot. For great muscular or nervous weakness I have seen tr. nucis vomicæ produce excellent results.

Finally, I have no sort of doubt as to the utility of alcoholic stimulants early and judiciously administered.

PICROTOXINE IN NIGHT-SWEATING.

Dr. F. R. Henry (*Med. and Surg. Reporter*). I have exclusively employed the active principle of *cocculus indicus*, picrotoxine, in the treatment of night-sweating in phthisis and other diseases. My success with this substance has been decidedly superior to that previously obtained by the mineral acids, belladonna and ergot, singly and combined.

My attention was first called to this use of the drug by a quotation from an article in the *Practitioner*, by Dr. Wm. Murrell. The dose used by Murrell was from gr. 1-80 to 1-60; the latter amount, four times a day, being the largest dose administered by him. My custom has been to give a pill containing gr. 1-80 at bedtime, which dose may be repeated once or twice during the day in obstinate cases.

As above intimated, I have not employed this drug solely in the night-sweats of phthisis. I recall a case of chronic pleurisy in which the effusion having been absorbed, convalescence was unaccountably retarded and prostration was so extreme that a latent, incipient phthisis was suspected. The skin was bathed in perspiration during the greater portion of the twenty-four hours, and this being the only discoverable morbid condition, I resolved to treat it with picrotoxine. It was promptly checked and convalescence set in immediately.

I have employed the drug in nearly one hundred cases.

PROCEDENTIA UTERI—MARTIN'S OPERATION.

By P. V. SCHENCK, M.D.

[After giving various methods used in treatment of this disease, the writer says]: Martin, of Berlin, if there be an elongation of the cervix, amputates it; he then denudes an ovoid surface on anterior wall, uniting with deep and superficial sutures; he then draws down the posterior wall, holding by ball forceps; the columna is noticed as a ridge; this ridge he circumscribes by an incision, and dissects off the flap, letting it hang down; covers the denuded surface by alternating deep and superficial sutures, bringing the edges together; the same on the other side. Next, circumscribes the (*introitus*) entrance by an incision beginning at bottom of flap, running up to one-half of labia, thence along the edge of the mucous membrane to median line, ending in front of the anus; then denudes, removes the flaps already left in this denudation, puts in deep and superficial sutures.

Having been in charge of a public charity hospital especially for women, I have had a large number of cases of prolapse of the womb in the third degree to treat, and I have tried many of the operative plans proposed, and, as the following has been so satisfactory in quite a number of cases, I take pleasure in calling attention of the profession to it. If the cervix uteri be hypertrophied and elongated, and there be laceration, take (of course preparatory treatment has been already employed) a Nott's vulcellum, place it in the cervix, which draw well out, and perform hysterotrachelorrhaphy; then replace the womb and perform Martin's posterior operation. There is no doubt but that surgical operations must some day take in this lesion the place of all other treatment. Localization, says Virchow, is the principle of modern medicine. By this operation the perineum is repaired, the columna and rugæ with furrows restored (all other operations cut these away); an effectual obstacle is placed so that it is impossible for the cervix to turn under the pubis, involution will go on in the vagina, and its recreative power be displayed; the cervix uteri is nominally restored, and the womb takes up the wondrous tale and continues the story of birth. You need have no fear of the anterior wall; it depends upon the posterior for support; its prolapse is the result of, not the cause of prolapse of the womb. The dermoid condition of the vagina will rapidly change and the epidermis be replaced by soft epithelium, and thus a normal influence is spread from one pole of the sexual system to the other. The success and result of this operation is far in advance of anything we have yet had. That it is not perfect is an inducement for further study; but so far, as I believe, it is superior to any other mode, better in its success, and fails less in its failures. The operation in Martin's hands has been successful in 18 cases out of 20; in mine, in five cases out of seven.—*Med. Journal, St. Louis, Mo.*

TREATMENT OF NASAL CATARRH.

The case presented itself at the clinic December 1st, with nasal catarrh of two years' standing. The discharge was thick, yellow, occasionally mixed with blood and scabs, and excoriated the nostrils. He was directed to cleanse the nostrils thoroughly with warm salt water twice daily, using both the anterior and posterior nasal douche, and immediately afterward the following, used in the same way:—

R. Ammonii chloridii..... ʒ iv
Aque..... Oj. M.

SIG.—Tablespoonful to douche.

When the nostrils become accustomed to this, use a chlorate of potash sol. of the same strength; then after a time stop these and alternate between the two following prescriptions:—

R. Glycerini..... ʒ ij
Acidi tannici—add as long as it
will dissolve.
R. Cupri sulphatis.
Ferri sulphatis..... a a ʒ j
Aque..... ʒ ij. M.
Ft. sol.

SIG.—Begin (with each of the above) with 5 to 10 drops in each douche of warm water, and gradually increase strength.

After alternating between the last two for a time, he may use the following:—

R. Iodoform. pulv. ʒ j
Extract. geranii..... gr. x
Acid. carbolic..... gtt. xv
Vaseline..... ʒ j. M.
Ft. unguentum.

SIG.—Saturate absorbent cotton with it and apply up the nostril at night.—*Prof. A. W. Calhoun in Atlanta Medical Register.*

THUMB-SUCKING.

Dr. Goodwillie of New York City, at American Medical Association, reported a case and illustrated it by a wax model. The treatment consisted in breaking up the habit by applying a leather pad to the elbow, preventing the hand from coming to the mouth; and nasal catarrh is to be treated by douches and the application of powder blown into the nose, proper food, clothing and rest. His conclusions were as follows:

1. Thumb-sucking is more disastrous to the health of the child than the sucking of the other fingers; for the thumb, once in the mouth, it more readily remains during sleep.
2. It interferes with the child's proper rest, which should be continuous and undisturbed, and so becomes a source of nervous irritation and exhaustion.
3. It interferes with the natural respiration through the nose, and sets up abnormal conditions.
4. It malforms the anterior part of the mouth and affects proper mastication.—*Va. Med. Monthly.*

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MONTREAL, JUNE, 1882.

We have recently been informed that Messrs. Reed & Carnrick and the New York Pharmacal Association of New York city have opened a branch house in Toronto under the management of Mr. H. P. Gisborne, who has been associated with them for many years. We note the announcement with pleasure, as evidencing that the sterling claims of their respective preparations, viz., Maltine and Lactopeptine, have been appreciated by the profession in Canada, and we trust that the enterprise of these representative houses will meet with substantial recognition, particularly as they invariably keep their medicinal products in the hands of the Medical Profession. Mr. Gisborne announces that samples and circulars will be forwarded upon receipt of application at Canada Branch, 10 Colborne Street, Toronto.

OBITUARY.

The late Dr. GEORGE W. CAMPBELL.

We are sure that we but re-echo the sentiment of the profession of this Dominion when we express our deep regret at the somewhat sudden and unexpected death of Dr. George W. Campbell. This melancholy event took place at Edinburgh, Scotland, on the 30th of May last; and although far from home his last moments were watched over by the loving tenderness of two of his daughters. Dr. Campbell left Montreal on the 31st of March last, sailing from Halifax for England two days later. For several years he had suffered much from chronic bronchitis, induced originally by a wetting he received on being upset in his canoe on the Marguerite, while salmon-fishing. This bronchitis was every now and again aggravated by slight attacks of pneumonia, which warned him of the necessity of care in the exposure of his person. Unfortunately on his arrival in London, the weather

was anything but favorable for him, and he had a sharp pneumonic attack. This he apparently recovered from, and he was removed to Edinburgh in an invalid car. We understand that he recovered sufficiently to get out, but the east winds of Edinburgh, so keen and penetrating, relight the attack, and although the best skill of that great seat of Medical learning did all that science could do it was of no avail, and, far away from his home, he passed to his rest. By the death of Dr. Campbell, the profession of the Dominion loses its most distinguished member, one who for almost half a century has been identified with it, and assisted not a little in raising it to the high position it now occupies. Early identified with the efforts made to give Medical education to the youth of Canada, he had the satisfaction of seeing his efforts crowned with success, and knowing that all over this continent are scattered a small army of Medical men who received a portion of their knowledge from his hands. He loved the Medical Faculty, of which he was so long a prominent member, with a loyalty and a devotion which did much to assure its success, and to replace him is well nigh, if not impossible. Commencing practice when Montreal was but a petty town he saw it grow to a magnificent city of two hundred thousand inhabitants, and with its rise and extension grew his reputation and influence. All the prominent men of to-day were his contemporaries, and on his medical opinions, political and otherwise, they placed implicit confidence. In this respect, no one can ever hope to replace him, for with the growth of the city diverse medical interests have been created; each of these have their leader, but we question if all combined could influence the public mind as he did. Strong and decided in his opinions, those who felt it their duty to oppose him found in him an open and manly opponent. When the struggle, so to speak, was over, none was more ready than he to extend the warm hand of personal and professional friendship. It was this example of his which has done so much to make the entire English Medical profession in Montreal feel kindly toward each other, and this in spite of much strong Medico-political feeling. May his influence extend to all future time! In all our local Medical charities he took a warm personal interest; the Montreal General Hospital especially bears witness to much of his fostering care. Dr. Campbell was as successful financially as he was professionally, and with most of our large monetary corporations he was closely identified. For

years he had been a director of the Bank of Montreal, and latterly its vice-president. He was also a director in the Montreal Telegraph Company, Montreal Gas Company, Loan and Mortgage Co., and several others. In all of these his judicious counsel was well recognized. Dr. Campbell was born at the Clachan House, Rosneath, Scotland, his father being chamberlain to the then Duke of Argyle. He received his professional education at the University of Glasgow, where he graduated in honors in 1831, the late Dr. Norman McLeod being his fellow student and intimate friend. After still further pursuing his studies in Dublin and elsewhere, he came to Canada early in the summer of 1833, and began practice, opening his office on the corner of St. Gabriel and Notre Dame Streets. In 1835 he was appointed to the Chair of Surgery in McGill College, and this he held for forty years, having retired from it in 1875. As a lecturer he was not brilliant, but the subject matter of his lectures was everything that a student could desire. As a diagnostician he excelled, and as an operator he was brilliant, and this in spite of an ankylosed right wrist. His reputation as a surgeon extended throughout Canada, and his surgical consultation practice was very extensive. In 1860 he replaced the late Dr. Holmes, as Dean of the Medical Faculty of McGill University, and shortly after the University conferred upon him the degree of LL.D. The position of Dean he held up to the time of his death. Dr. Campbell did much to establish the fame of the Village of Cacouna, on the south shore of the Lower St. Lawrence, as a watering place, and he witnessed its progress from that of an insignificant fishing village to a fashionable watering place, containing many beautiful residences (among them his own), and visited yearly by thousands in search of or the maintenance of health. He was a keen salmon fisher, and for years had been the lessee of the Marguerite, a river emptying into the Saguenay, and on its beautiful waters he passed many weeks each summer. A few months ago, by the death of his brother, Dr. Campbell succeeded to the family estate of Peatoun, on the shores of Loch Long, and it was in connection with it that he visited Scotland. By this same event he became heir it is believed to a baronetcy which had been extinct many years. The writer of this article was permitted, a few months ago, to examine some of the facts connected with his hereditary claim, and feels satisfied that care and perseverance would have

established it beyond a doubt. Naturally of a retiring disposition he shrank at first from unearthing his claim, but we have reason to know that forced by friends he had taken the initiatory steps towards doing so. While the addition of a title would have been gratifying to his many admirers, it could not have given him a higher place in the estimation of his professional brethren and fellow citizens, who now mourn his loss. He has left behind him the history of a life remarkable in many respects, and well worthy of imitation.

The MEDICO-CHIRURGICAL SOCIETY of Montreal, at its meeting held on the 2nd of June, passed the following resolution :

"That the Medico-Chirurgical Society of Montreal have heard with deep regret of the unexpected death of the late George W. Campbell, A.M., M.D., LL.D., Emeritus Professor of Surgery and Dean of the Medical Faculty of McGill University, and for many years a member of this Society, and its first President since its re-organization. A practitioner of medicine for nearly fifty years in this city, he acquired the confidence, the respect, and the regard of his professional brethren of the past and the present generations, by his eminent qualifications as a physician and surgeon, by his loyalty to and respect for the interests of the colleagues he met in consultation, and by the consideration and kindness with which he invariably behaved toward all, and especially the younger members of the profession.

That it is with profound sorrow that this society tenders its sincere sympathy to Mrs. Campbell and her family in the severe affliction which the loss of such a husband and father implies, and desires to assure them that the members of the medical profession of this city and country feel it to be an irreparable loss to them."

At a meeting of the Medical Faculty of McGill College, held on June the 1st, the following resolution was passed :

That the Medical Faculty of McGill University has heard with profound regret and sorrow of the unexpected death in Edinburgh of their beloved and respected Dean, the late George W. Campbell, A.M., M.D., LL.D., Emeritus Professor of Surgery in the University.

An active member of this Faculty since 1835, he contributed very greatly, by his distinguished abilities as a teacher of surgery, to establish the reputation of its medical school ; and as its Dean since 1866, by his administrative capacity, his de-

votion to the duties of his office, his wise counsels, his unvarying kindness and consideration for his colleagues, and his high personal character, he not only increased the efficiency of the department of the University over which he presided, but secured the cordial co-operation of all its members in the advancement of its interests, and attached them personally to him as their most valued friend and most distinguished and honorable colleague in the teaching and practice of the medical art.

And, further, that this Faculty tenders to the bereaved family of their beloved Dean its deep-felt sympathy in the irreparable loss which has so unexpectedly befallen them, the profession to which he belonged, and the community in which he so long, so lovingly and so successfully labored.

At a special meeting of the Medical Board of the Montreal General Hospital, held on the 2nd instant, the following resolutions were unanimously passed :—

Moved by Dr. MACCALLUM, seconded by Dr. REDDY,—That the Medical Board of the Montreal General Hospital have heard with feelings of the deepest sorrow of the death of their beloved and honored chairman, the late George W. Campbell, M.D., LL.D. Appointed to the staff of Visiting Physicians of the hospital in the year 1835, he, by his distinguished abilities as a surgeon, laid the foundation of that great reputation which this hospital has long enjoyed as a practical school of surgery. Endowed with rare powers of observation, with a powerful intellect and a cultured mind, his decisions as to the nature and proper treatment of the cases of disease that came under his notice were singularly prompt and correct; and his opinion was always invoked and held in the highest respect by his colleagues. Invariably generous and considerate to his colleagues and the medical staff and to the junior members of the profession, kind and encouraging to the student of medicine, and just and honorable to all with whom he was in any way associated, he was regarded with an affection and esteem rarely accorded by men to their fellows, and in his death we all mourn the loss of a dear and valued friend.

And, further, That this Board tender their deep and heartfelt sympathy to the bereaved family of their late beloved Chairman, so suddenly plunged into the very depths of sorrow by the unexpected loss of a devoted husband and father, with the earnest prayer that He who was “a Man of sorrows and acquainted with grief” may sustain them in this their hour of affliction.

The remains of Dr. Campbell arrived from England by *S.S. Polynesian* on the 14th, and on the 16th June they were interred in Mount Royal Cemetery. The funeral *cortège* was one of the largest seen in Montreal for years.

THE LATE DR. MUNRO.

By the death of Pierre Antoine Conefroy Munro the Montreal School of Medicine and Surgery loses the last survivor of its founders. The deceased gentleman was well known in Montreal, having begun his professional career when our city was far from what it is at present. He was a son of the late Dr. Henry Munro, who died in 1856, and who was for several years Surgeon to the North-West Company. The father of Dr. H. Munro was a U. E. Loyalist, and a descendant of the Munros of Fowls, Ross-shire, Scotland. He lost all his property in the State of New York on account of his views on American independence, and settled in Canada, where he became a Legislative Councillor. Dr. Pierre Conefroy Munro, his grandson, was born in 1811, and was licensed to practice medicine in 1834. In 1837 he became one of the attending physicians to the Hotel Dieu, a post which he occupied till his death, though latterly age and infirmities prevented him from attending to the duties of it. During nearly half a century he was a daily visitor to the sick wards of the Hospital, and his regularity had become proverbial. He had, besides, a large private practice, and enjoyed in his day an enviable reputation as a physician and a man. In 1848 he founded the Victoria Medical School, along with Drs. Horace Nelson, Sutherland and others, and filled the chair of Surgery till very recently. Though the career of a medical man may offer to his biographer but few facts of public interest, still, as with all who work honestly and faithfully, though in seclusion, for the general good, the greatest meed of praise may be given in the words: “he did his duty.” This Dr. Munro ever did, and thereby he merits at once the remembrance and the gratitude of his fellow-citizens.

At the last regular meeting of the Medico-Chirurgical Society of Montreal, the following resolution, moved by Dr. Hingston and seconded by Dr. Howard, was passed:—“That this Society has learned with deep regret of the tragic termination to a long and useful life, in a moment of mental disturbance, as a result of long and severe physical suffering, of Dr. P. A. C. Munro,

one of the most distinguished surgeons and anatomists Canada has produced, also one who gave evidence during his life of the highest moral character."

We notice with regret the death of the following eminent members of the profession in Great Britain:—

Dr. George Budd, F.R.S., formerly of King's College Hospital, London, at the advanced age of seventy-five years.

Dr. T. B. Peacock, physician to St. Thomas' Hospital, London, who died suddenly on June 1st.

Professor Spence of Edinburgh, the rival and former colleague of Lister.

PERSONAL.

Dr. Frank Hamilton of New York was in Montreal the middle of June. He visited both the Hotel Dieu and the Montreal General Hospital.

Dr. Henderson, formerly of the Montreal General Hospital, has received the appointment of surgeon on board the SS. "Deserade," of the Canadian and Brazilian line of steamers, which sailed from Montreal on the 21st June bound for the West Indies and Brazil. He expects to be back by the 1st September.

Dr. O. C. Edwards of Montreal has gone to the North-west. The prospect is that he will permanently locate there.

At the regular meeting of the Medico-Chirurgical Society of Montreal, held on the 26th of May, Dr. O. C. Edwards tendered his resignation as Secretary, on account of his removal to the North-West. The Society thereupon unanimously passed the following resolution: Moved by Dr. F. W. Campbell, seconded by Dr. Roddick, "That this Society accepts with regret the resignation of Dr. O. C. Edwards. In doing so, it deserves to place on record its full appreciation of the valuable services he has performed during the four years he filled the position which he now resigns. In parting with him the members of the Society desire to express the hope that in his new home in the North-West he may meet with that success which his professional skill and kindness of disposition fully merit."

Dr. Edwards was then elected a corresponding member of the Society.

EARACHE.

In the American Medical Association, Dr. Jacobi remarked that closing the mouths of

infants and children, and simply blowing into the nose, is often a very valuable method of relieving severe earache, and that in a number of cases he had obtained most excellent results from this procedure, the cause of the trouble probably being a catarrhal affection of the Eustachian tube.

THE PHARMACEUTICAL ASSOCIATION.

The first meeting of the newly-elected council of the Pharmaceutical Association of the Province of Quebec was held on the 23rd June in the rooms of the Association, corner of Notre Dame and McGill streets, when the following gentlemen were elected office bearers for the present year: Alexander Manson, President; H. F. Jackson, 1st Vice-President; Roderique McLeod, Quebec, 2nd Vice-President; John Kerry, Treasurer; Wm. Ahern, Secretary and Registrar, provisionally; Board of Examiners: J. D. L. Ambrose, Montreal; F. E. Gauvreau, Quebec; Henry R. Gray, Montreal; Roderique McLeod, Quebec; H. F. Jackson, Montreal, and Alexander Manson, Chairman of the Board, *ex-officio*.

DIARRHEA OF TYPHOID.

The New York *Medical Record* says that the excessive diarrhea of typhoid is said to be remarkably controlled by the administration of twenty drops of turpentine every two or three hours.

REVIEWS.

How we Fed the Baby, to make her healthy and happy; with health hints. By C. E. PAGE, M.D. 144 pages. Paper, 50 cents; cloth, 75 cents. New York: Fowler & Wells, 753 Broadway.

This treatise heralds a new departure in the alimentation of infants, and gives every evidence of conscientious and intelligent study on the part of an author of broad experience, familiar with all the details of the nursery. The central feature of the work represents the infancy of the author's own daughter, whose first months were happily made free from the common inconveniences, not to say horrors, popularly supposed to be unavoidably connected with this period of life. Our author makes plain how infantile diseases may, in great measure, be avoided, and infant life made as free and joyous as that of the most fortunate among the lower animals. We know this manual will be welcomed by many mothers in all parts of the land, as one of the most important questions with parents is *how* to feed the baby, to promote its health, its growth, and its happiness. The hope of the children must be found in an enlightened motherhood, and every effort in this direction should be welcomed. *Physicians* will know how to prize the work of a specialist in this particular branch of medicine.

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Original Communications.

HYGIENE OF OUT-DOOR SPORTS.

By JAS. PERRIGO, M.D., M.R.C.S. ENG.,

Professor of Surgery Bishop's College.

A lecture delivered before the Young Men's Christian Association, December 6th, 1881.

Mr. Chairman, Ladies and Gentlemen,—It has fallen to my lot to give you a lecture to-night on the hygiene of out-door sports, or, in other words, to tell you something of the manner in which these sports should be indulged in so that your health will be improved and not injured by them. Some of you may smile at the hint of the possibility of a person's health being injured by out-door sports, as most people are led to believe they can do nothing but improve a person's health. I have nothing to say on the subject of out-door sports but what is commendable, but I have something to say on the abuse of them, and a good deal to say of the accessories that accompany that abuse. Here, in Canada, we have been fortunate in inheriting most of the sports of the Mother Country, not only the sports themselves, but the love for them as well; and I think you will agree with me, the people in England, from the events of the last two years, will confess that the Dominion, whether on water or on land, can shew representatives of whom she is not a little proud. Some of the sports of the Old Country are not much followed here, for the simple reason our young men have neither the time nor the money to do so. In this country,

which is young, we have to work for our living, and in doing so we are helping our country to progress, so that what time is given to out-door sports is snatched, as it were, from the wear and tear of every-day life, and herein lies the danger of abusing them, that is, of attempting to do too much in a short time, without sufficient preparation. It is a sorrowful fact that the few young men of Canada who have inherited wealth from their parents, are generally poor specimens of manhood. They do not care for anything that helps to build up a nation. They take no pride in a fine breed of horses; to be in a well-built yacht would be a nuisance to them; to have a well-stocked farm and to take pride in it is foreign to their nature; their only pleasure and occupation appearing to be, to spend recklessly, the wealth their parents worked so hard for. In addition to the sports we have inherited from the Mother Land, we have those that are peculiar to our country, and can be truly called Canadian. I refer to lacrosse, snow-shoeing and tabogganing. Cricket playing is well implanted here, but it does not seem to have taken root as deeply as it has done in England. There appears to be a growing desire for yachting, but that is limited to a few who have the means and the time to indulge in it. For those who can, there is no recreation that affords such health-giving exercise. Boating or rowing nearly all can take part in, as there are splendid opportunities close to the city for its exercise.

We have also foot ball, base-ball and other minor sports that claim their share of patronage from the young men of this city. They are all good, health-giving pastimes when properly indulged in and not abused. The indulgence in these sports has several objects in view, two of which are the most important, viz., pleasure and health. Without the first, you cannot well have the other. The exercise should be of a nature to give pleasure, to be in harmony with the mental operations, a certain buoyancy of mind being required to give effect to muscular action. Without this you will not experience the amount of benefit you should. Now, among the great number of young men who are members of the different clubs of this city, how many are able to undergo the same amount of athletic exercise. Supposing there are 4,000 young men, members of the different clubs, how many of them would you find constituted alike. I venture to say, you would find very few of them exactly alike in physical strength and temperament; some you would find enjoying the best of health, possessed of strong muscular strength, who do not feel the daily fatigue of business very much, and who are quite able to join in the snow-shoe tramp in the evening, or practice at lacrosse in the early morning. Others again, you would see enjoying good health, but of a more delicate build, and not possessed of the animal spirits of the former to fully surmount all the worries of the day. Think you, that those who belong to this class are as well able for the snow-shoe tramp across the mountain, as it is now practised, or the lacrosse exercise as the former. Others again, you would see possessed of indifferent health, with irritable temperaments, who are worried by the slightest thing going wrong, and when evening comes are tired out; still, the longing for companionship and the idea that all or any kind of athletic exercise does good, they also join some club, and their courage makes them attempt to do as much as their more favored companions. Perhaps, they succeed, and they earn the plaudits of their friends as being plucky individuals. Plucky young fellows, they, no doubt are, but how much benefit to health has been derived from this strained exercise. It is more particularly on this point I wish to say something, to point out, if possible, in my humble way the dangers to be avoided.

To be able to indulge in athletic exercise in a manner to obtain all the possible benefit that is to

be derived from it, a young man, unaccustomed to it, and who is employed in a sedentary occupation, as three-fourths of our young men are, must begin by degrees and work his way systematically along, until he feels that he is able to perform feats with ease that would have previously distressed him.

Some may reach this point very easily and in a short time, and when they have done so are fine specimens of manhood, but is this the case with all? Others will reach it, after a longer course of training, and if it has been carried out with prudence, will be improved by it, but there will be a majority who will never be able to reach the excellence of the first class, and who, by persistence in a system of over-training, will do themselves permanent mischief. Some of you, who are veterans in athletic exercise may smile and say you have heard all this before: well, perhaps, you have, but you may be more surprised when I tell you that a strong man may over-train, or commit some act of imprudence in his exercising that may prevent him ever having grey hairs. Often have I gone into houses in this city, when on my rounds, and have seen cups and medals adorning the side-board, won in this or that sport, and have asked, where are the winners? Some are prematurely aged, broken down in fact, and subject to palpitations of the heart; others are dead, some of them having died suddenly? Others again, and they are in the minority, still retain their vigor, because whatever they did in the way of training was done with prudence and system.

I read some time ago of a noted athlete of an American university dying suddenly from heart disease, and of the plaudits passed upon him by the press, but not one word of warning as to the cause of his heart disease, which was nothing else than prolonged excessive training. To this also may be ascribed the death of Renforth, with which you are all familiar. Our own city furnishes examples as well, and such have occurred in my own and the practice of my medical friends. I venture to say that if the different athletic clubs would examine their statistics for some years past, and see who were their prize winners and what was their condition at the present day, they would find I am not speaking too strongly. They would find the majority dead, from a sudden death, or dead from a short illness, and that only the minority were living. They would find this minority divided into two classes, a large and a small one. The large one would consist of some who were

nervous and irritable, who were easily fatigued by either mental or physical exertion, and some suffering from heart or chronic lung disease. The small class would consist of those still in good vigor for their age, enjoying good health—the reward of their prudence. You may think I am speaking too forcibly upon this point, but I assure you I am not. It is the strong convictions of a physician that force me to make these statements. I well remember attending the head of a family, who was a noted show-shoe runner, who died two years ago from consumption. There were no traces of that disease among his relatives, as his family history was good. Over and over again, that man told me he wished he had his life to go over again, how he would have avoided excessive training, how he would have taken greater care of himself, going over the old, old ground, that we physicians have heard so often,—want of prudence and care of health. Health, ladies and gentlemen, is not valued until it is lost, and then how much we would give to regain it. I was much pleased some time ago at the news that Hanlan had decided to retire from future contests and praised his wisdom for so doing, and predicted a good long life for him, provided he was temperate and did not take up too quickly with a sedentary form of life. I regretted very much afterwards when it was announced that he was going to row other races. He should be satisfied with his position, one that is unrivalled in the history of rowing, and he should remember that the pitcher may go once too often to the well. He need not think of always remaining the hero of the public. Let him but lose a race, and he suddenly becomes an ordinary individual.

Want of prudence, in fact, gentlemen, the want of common-sense, in some of our out-door sports does as much, if not more, harm than over-training. Last year, I examined a young man who came into my office, complaining of short breath, and palpitations of the heart. His own physician was out of town. I found that he had a most irritable heart, acting in the most irregular manner, ready to go off at a tangent upon the slightest exertion. When I obtained his full history, I found his occupation was a sedentary one, being occupied in an office all day long, that he belonged to a snow-shoe club, that he was in the habit of joining members of it at the College gate, and going over the mountain at the double quick to Côte-de-Neiges, and he took some pride in telling me that he was

never the last, that the whippers-in had never to look after him. Now, what amount of benefit do you suppose this young gentleman had derived from this method of snow-shoeing? Remember, I say, method, I do not say snow-shoeing. I won't allow any one to say a word against this amusement. As an out-door sport, it is equal to any. Here is a young man, not 28 years of age, with little or no chance of muscular exercise, dashing at once into work that would cause a well-trained athlete a good deal of exertion. The course over the mountain to Prendergast's is not by any means the easiest to travel quickly on, and when the distance is covered at semi-racing speed by green-horns, nature inflicts a punishment, and this punishment, in a great many cases, is permanent. This young man attempted too much without any preparation, and his steam engine, his heart, has been permanently weakened by it. Why, a locomotive before attempting to take a train of freighted cars along an up-grade, must back up a good distance to get a good head-way. The engineer would never think of starting immediately at the foot of the hill. You will understand this much better when I tell you that in the ordinary state of a man's health, during ordinary exercise or occupation, a man's heart will dilate and contract, on the average, 72 to 76 times in a minute. This, you can tell by feeling your own pulse at the wrist. Buck says, in his work on Hygiene, that during moderately energetic exercise, the heart beats more frequently and forcibly, the arteries dilate, and a larger stream of blood is propelled through the body, but especially to the muscles, where the increased flow is required. If the exertion be very severe, the contractions of the heart become still more frequent, feebler and finally irregular, while at the same time, a peculiar form of dyspnoea or breathlessness is experienced which is familiar to you all, as "loss of wind." This distress in breathing is produced by disturbance of the equilibrium between the respiratory and the circulating organs, the disturbance in question being the combined result of several causes. When the equilibrium is restored the person is said to have gained his "second wind," and then he is enabled to continue his exertion up to the limits of muscular exhaustion.

Now, picture to yourselves, taking the young man we have been speaking of as an example, how his heart must have pumped the blood through his blood-vessels in his tramp at the double-quick

over the mountain, and how his lungs must have been embarrassed, in a state of semi-congestion, and the length of time it would take for everything to be quieted again, especially when the rest is taken in an atmosphere filled with tobacco smoke. Is that man's health benefited by such exercise, or has he been made more capable of attending to his business duties the next day? You will answer this, perhaps, more easily, when I tell you that such forced work entails a certain drain from the nervous system as well; the more nervous and irritable the temperament the man may possess, the greater is the drain. Supposing now the young man leaves his office at 6 o'clock in the evening, he has his supper by 7, and is then ready for the evening. He joins his club at the college gate, goes over the mountain in a leisurely manner, takes his warm coffee, has a good rest, and returns perhaps at a quicker pace, arriving home feeling brightened up, not fatigued and ready for a good sound sleep. Which is the better way, gentlemen, the first or this? Which method is likely to give the most health? Which do you think the Life Insurance companies would endorse? In fact I cannot say that I favor this racing across the mountain at all, for the very good reason that nine-tenths of the young men who do so have not the physical training to be capable of enduring that forced exercise, and I am satisfied the end of every snow-shoeing season sees some young men injured by it.

It may be surprising to you when I say there are some young men, not many, who are not fit, after a hard day's application to business, for athletic exercise. What they require is rest, rest enlivened by music or agreeable reading, and here is seen very forcibly the necessity of a public free library. If such men attempt athletic exercise, there is a double wear and tear upon their nervous energy which is soon felt, and instead of feeling benefited, they find a lassitude ensuing which is difficult to shake off, so that they have to exercise more will power to attend to their ordinary daily duties, until at last they are forced to give up what they should never have attempted. The young men belonging to this class can derive benefit from a well-conducted gymnasium, and I am happy to say we have two good ones in this city. Although the exercises in a gymnasium have not the advantage of the outside air, they can be made very pleasant and health-giving, particularly if the exercises are accompanied by music. One advan-

tage they possess, however, is the fact, the preceptor is always present, whose duty it is to make himself acquainted with the peculiarities of each pupil. Several of my young patients owe Mr. Barnjum a debt of gratitude for the good he has done them, and I take this opportunity of thanking him for the time and care he has bestowed upon them. I look upon a gymnasium as a necessity to every school in a city; in the country the same need for them does not exist, as there the scholars have long distances to go to school, and they have usually more out-door exercise than their cousins in the city. A school gymnasium is not so much for the purpose of giving the scholars larger muscles, but to keep them and every organ in the body in a healthy state of functional activity. If a task be made of these exercises, our object would be defeated, but care should be taken to make them a pleasant recreation. Music should always accompany such exercises. When conducted in this manner, boys and girls will always look forward with pleasure to the gymnasium hour. The presence of the preceptor will ensure the absence of danger, as, knowing the capabilities and wants of his pupils, he is able to govern their exercises accordingly. I trust our school commissioners will take this hint.

Over-exertion, gentlemen, will cause a good many things that you should be made acquainted with; of course, I mean in regard to both the trained athlete and the one unaccustomed to steady exercise.

First of all, it will cause irritability of the heart; this is evidenced by palpitation, breathlessness, pain over the region of the heart, and the pulse will be quickened. This has been frequently observed in troops who have been subjected to much forced marching; in fact, some years ago, when we had a large garrison stationed here, and the troops were marched around the mountain, or long distances in heavy marching order, frequently during the week, an army surgeon told me there were several such cases established, so much so that the general's attention was called to the fact, and the condition of marching was altered. Second.—Over-exertion may cause rupture of a valve of the heart. This is generally the aortic, and from this rupture, in time, secondary changes will take place which do not tend to improve matters. A person with a heart either in the first or in this second condition generally falls an easy victim to any serious acute disease that may attack him.

Third.—Over-exertion may cause an attack of hemorrhage from the lungs. One single over-strain in a delicate person, perhaps predisposed to lung disease, may do this mischief. Every physician can cite examples of this from their experience.

Fourth.—The aorta, the largest blood-vessel we have in our bodies, may have its walls so weakened at some particular point, that an aneurism at some future date may appear, the rupture of which would cause immediate death. Among laborers whose work is very severe this affection is not very rare, and the daily papers are frequently giving cases of sudden death in the streets, or on the wharves, when the Coroner's inquest shews it to have resulted from the rupture of an aneurismal sac.

Now, gentlemen, I have not mentioned these things to frighten you, nor to make you feel as some medical students do, who fancy, during their first session, they have every disease that is lectured on, but simply to point, out several reefs and sunken rocks that are to be encountered and avoided while indulging in any of the out-door sports. I think it is right you should know these things, as it will set you thinking of the objects and advantages to be obtained from them.

Men very often need rest when after a hard day's harassing work they are fatigued, be it in an office, retail store, or what not, rather than athletic exercise. I do not mean all men, but a goodly proportion of them, particularly such as have irritable nervous temperaments. For such men to persist in aiming at the standard of those who are differently constituted is folly, and will surely lead to bad results. I could tell you of the case of a prominent member of the bar, but recently deceased, who after a hard day's work in pleading difficult cases, cases, perhaps, that involved a great deal of thought, would habitually walk eight or ten miles every evening, when he should only have walked three, and that too when he had rested from the fatigues of the day.

Physical exercise, gentlemen, means also a certain drain or demand upon our nervous energy which is derived from our nerve centres, and if we drain the latter pretty well by the work of the day, as in the case of the advocate, and make another call upon them in the evening by too great physical work, we turn the old adage of "too much work and no play making Jack a dull boy" into one of "too much work and too much hard play making Jack, sooner or later, an invalid." None of you

wish to be dull, and I am quite sure none of you wish to be invalids, so that bear in mind the fact that by the exercise of a little caution and prudence you may really obtain pleasure and health from out-door sports.

I would not have a race of effeminate young men in the city, who, without stamina and courage, would hesitate to soil their boots with mud, who would think more of the appearance of their neckties than the condition of their muscular system, and who would rather criticize the dresses worn at a ball than the merits of individual players in a well-fought lacrosse match.

There are dangers in every sport and out-door pastime, but these can be reduced to a minimum by skill, and this skill can be acquired by prudent systematic training, under experienced guiding. There are many amusements, indulgence in which is more ruinous to health than imprudence in out-door athletic exercise. Dancing in warm badly-ventilated rooms perhaps carries off, indirectly, more victims than any out-door sport, and perhaps our skating masquerades are not guiltless in this respect.

Out-door sports are a necessity in every city, and it behoves the captains and the older men of the different clubs to see that the new members or those of a weakly constitution do themselves no harm. Most of the sports we have in Montreal can all give increased strength and health when properly followed, and I would not do or say anything that would lessen their importance. It is quite true the time to indulge in these sports is limited, and it is equally true we all have to work very hard for our living. Men, in 1881, are not so content to live and die in the same condition as their parents. They have more ambition, and are always aiming to climb higher the ladder of life, so that competition is keener in every line of industry. There is a feverish haste to become rich. This must be the reason that the retail merchants keep open to almost all hours of the evening, with jaded clerks behind the counter, who read of these sports but who can never join in them. Another reason, perhaps, is the fact, the retailers are afraid of a great tyrant, the public, who will purchase things just at whatever hour it suits, but I think if the retailers, who were once young men, would act in a concerted manner, and tell this tyrant that, as this was a land of liberty, their stores would be closed by such an hour, say 7 o'clock, and that all purchases must be made before that time, this

tyrant would be obliged to give in, so that not only the clerks but the employers themselves would be in a position to derive some pleasure and relaxation by taking part in some of our out-door sports; the clerk taking his snow-shoe tramp, and the employer a merry drive around the mountain. To aim at this, gentlemen, is good healthy ambition, and when attained means good health and a long life of usefulness.

A pastime that proves a source of pleasure to a great many is tabogganing. Unhappily, a good many accidents have occurred, which have restrained parents giving to their sons and daughters the permission to indulge in it. Last winter I had two fractured limbs to attend to, the result of injury while tabogganing, and medical friends have told me they also had injuries under their care from the same cause.

There is no reason why accidents should occur in tabogganing, as those I had to deal with were the result of sheer thoughtlessness. They occurred on a hill that is by no means considered dangerous. Want of regulation of the parties on the hill was the root of the evil, and I am glad to see there is now a tabogganing club started, and I hope the members of it will have sufficient influence to persuade our City Fathers to grant grounds on the Park for this sport; and that when the ground is granted there will be certain regulations instituted, so that collisions will be avoided, and one taboggan will not be attempting to telescope another. I should like to remind our City Fathers, as I have done the retail merchants, that they too were once young and dearly loved some recreation, and if they expect Montreal to retain her prominent position in the future it will have to be by the energy and activity of the rising generation. This energy and activity can only exist where there is health, and if, while attending to the welfare of the community at large, by cleaning streets, improving drains, and censuring the scavengers, they were to take some thought of those who were likely at some future date to fill the Aldermanic chair, they would need have no fear of the future of the city. In other words, it is the duty of the council to provide grounds of recreation for the young, not so much for those who are rich, but for the poor and middle classes.

A sport that can be truly called "national" is lacrosse; when divested of all unnecessary roughness, it is, in every sense of the word, a scientific game. I well remember when such was not the

case, when it was the ambition of each player to see his opponent stretched on the ground, and many a time have I been made in a most undignified manner to study astronomy, and often have I attempted to make others do the same. Now all this is changed, and both the skill and agility of our best team are well known outside of Canada. Some of our clubs practice in the long summer evening, or in the later part of the afternoons, but a good many of them practice in the early morning, and here it is, where some caution is necessary. Much will depend on habit, as regards violent exercise before breakfast, but in a great many cases it prostrates a man for the rest of the day. Hard work should never be attempted on an empty stomach, nor after a full hearty meal. To attempt hard physical or mental work after a full meal is to take away some of the nervous stimulus that should go to the digestive organs, and the door is opened for many digestive ailments that are discouraging to both patient and physician. On the other hand, it is equally harmful to do much physical work on an empty stomach, when the system is least prepared to endure it. These are the two extremes, and one is as damaging to health as the other. Some light food should be always taken by those who attend the early morning practice of lacrosse, or who take part in other sports at the same hour. A tumbler of milk, nature's food, with some stale bread is about the best. If this be done, the players will find they experience no feelings of languor nor will they suffer from headaches during the after part of the day.

This rule may appear very simple and elementary to you, but it is, nevertheless, an important one.

During the summer months it is the custom with most of our large establishments to give holidays to their employees, and it becomes a question of some importance with the young men how these holidays are to be spent. Some go to the seaside, some to the country, and a few to some lake or river in the woods to try their hand at camping out, with hunting and fishing. Some follow the bent their inclinations lead them, while a good many consult the depth of their purse, and act accordingly. Two years ago, a medical friend with two companions went on a fishing expedition to the Lakes, about 40 miles north of Maskinongé. They camped out the whole time, two weeks, and returned, well-recruited in health, and better men in every way. Last year, my friend went to the

sea-side and returned, he said, feeling not at all recruited from his trip. Being a man of very active habits, the lounging a person has to indulge in at the seaside did not suit him, and he told me he would prefer to spend treble the amount to go to the bush than to return to the seaside with his expenses paid. A good many refrain from taking a camping-out trip on account of the expense, but the expenses of the three gentlemen mentioned did not amount to more than \$20.00 each, in this being included the expenses of a guide.

Men who have never camped out must not think they will have a luxurious time of it, nor is it the romantic work that most writers on sporting subjects would have us imagine. It means hard work, sometimes privations through accidents, exposure to all sorts of weather, and I am quite sure if your employers were to compel you, as a part of your duties, to camp out a portion of your time, you would consider yourselves very ill-used individuals, but, if you have the right metal in you and have a strong love for the woods, the difficulties encountered in camping-out can all easily be surmounted. I admit for one man to go alone, well equipped with all essentials, the trip is expensive, as game is fast receding to greater distances from the cities, but when a party of congenial spirits can be formed, the expense for each one becomes less than a trip to the sea-side, and a much greater return of health for the money is received. I may, perhaps, be a little enthusiastic upon this subject, but I consider a holiday in the woods far superior to loitering time at a sea-side resort. To be fond of this kind of recreation you must be a lover of nature. You do not go into the bush with the single idea of killing game and bringing home a big bag, but you go prepared to enjoy nature as she is seen in the wild woods.

You will find, if you are of an observing nature, plenty of objects never before thought of to attract your attention and interest. For me I confess there is a fascination in it that no other sport can afford.

Few people in this city have the slightest idea of the scenery that is to be seen in the different tributaries of the Ottawa river, nor have they any conception of the number of beautiful lakes that exist. Most of these districts are well stocked with different kinds of fish and game, but I am afraid that unless the Government takes some decided steps to prevent the wholesale slaughter that is continually going on, they will soon be things of the past. The German and the Polish settlers are the worst

offenders. There are large bodies of these people settled in the districts that I am most acquainted with, and their numbers are continually increasing. They are the most ruthless destroyers of game I have ever met. They are worse than the pot-hunters, as the latter hunt for the market and the other for the mere sake of killing.

To enjoy camping out, and to derive all the good you can from it, you must go well prepared for it. A good tent for yourselves and a smaller one for your provisions are necessary. Good Cornwall blankets, rubber blankets and changes of clothing are all required. A portable coal-oil stove, made for the purpose, is now generally used at camps, and is found more useful than the usual open fire, although the log-fire is cheerful and comfortable to have the evening chat around, and fight the day's work over again. If you have the open fire care must be taken that it is at a safe distance from the tent. Carelessness in this matter has destroyed the pleasure of more than one camping expedition. In selecting a camp-site, your first duty is to select a sheltered locality in close proximity to good drinking water. If you are on a lake shore, or the bank of a river, you will have no difficulty in this respect. For further details upon the necessary articles for a camping expedition, I would refer you to the many excellent manuals upon this subject.

I have said there are precautions to be taken in having all the articles required, but there are others as well. The dangers of camping out are best understood by those who have had the experience of several expeditions, and they are not to be belittled by the superficial judgment of those who do not see dangers unless they are staring them in the face. One of the dangers is attempting to do things for which a person is physically unfit, thereby straining his heart and bloodvessels to such an extent that serious results ensue, although possibly they may not be felt at the time.

I have seen this done several times in portaging, where the canoes and their cargoes have to be carried to the next water. Some young men will start with a good load that they could with tolerable ease carry on one of our pavements, but when the portage track lies over a rough road, rocks, boulders, fallen trunks of trees, being in the way, up and down hill, or perhaps through a swamp, this load will be ten times heavier, and before a mile has been accomplished he will have to give up. By persisting in this work permanent

injury can only be the result. You do not go out two or three weeks camping for work that half kills you; you go for recreation and health, so, therefore you must attempt that only which you can comfortably perform, and have pleasure in the accomplishment of it. Another danger is getting heated and lying on damp ground afterwards to rest. This you will know yourselves is not conducive to a person's health. I have said you should have changes of flannel with you. This is important, so that when you come in to camp, perspiring after a hard day's tramping through the woods in pursuit of game, or wet from rain, you are in a position to change at once. This should be an invariable rule, and will greatly add to your comfort. A good rub down with a rough towel before putting on the dry clothing should be taken at the same time. When I first began 15 years ago to go on shooting expeditions, I well remember the discomfort I endured from neglect of these precautions. From neglect of these points, some fine young men have had to run the gauntlet of inflammation of the lungs and rheumatism. Rheumatism in some of its forms is a most insidious enemy, and when it has you once in its grasp is not in a hurry, under the best of treatment, to say good-bye. Some of the most obstinate cases of rheumatism I have ever met have been among shantymen, who, when they are exposed to rain, allow their clothes to dry on them. A good many will escape these dangers, but this does not lessen the fact that, for one that escapes, five suffer in one way or another.

Most young men when camping out indulge in bathing, and if they are camped on a lake shore the facilities for so doing will be all they can desire. A word or two upon this point may not be amiss. Apart from the question of cleanliness, we bathe for the purpose of improving or keeping in a good healthy condition the functions of the skin, thereby promoting the general tonic condition of the body. I have no doubt you all remember your first dip in cold water, the shock it gave, how you gasped for breath, and if you did not remain too long in the water, what a glow you felt all over after a good rub down. The effects of baths, either cold or warm, are produced by their action on the cutaneous nerves and vessels. A cold bath causes the capillary vessels to contract. By capillary vessels I mean the very small minute blood-vessels supplying the cutaneous surface, and when I tell you that you

cannot prick your skin with a pin without injuring some of them, you will understand the immense number that exist. When these vessels contract, the volume of blood in the internal organs is increased, and if this change takes place suddenly, by a dip into cold water, in an inland lake or at the sea-side a shock is experienced, accompanied by gasping and quickened breathing. If the dip be not too prolonged, and the body be quickly dried and friction employed at the same time, reaction ensues, that is, the cutaneous vessels dilate, the blood returns to the surface, and a decided warm glow is felt all over the body. This is the process that takes place in proper bathing in cold water, and is conducive to the promotion of a person's health. With warm water bathing we have nothing to do to-night.

Certain rules should be followed in bathing, and it is well you should be made acquainted with them:

1. Do not bathe on an empty stomach nor immediately after a hearty meal. Three hours should intervene, at least, between a hearty meal and a bath.

2. If you bathe before breakfast, take a tumbler of milk or cup of cocoa, before so doing.

3. Do not remain too long in the water, 15 to 25 minutes is quite long enough; to remain beyond this will only lessen the good effect of the bath. Remember that unless you feel a glow after your bath, no good has been received, but perhaps some harm has been done. At the sea-side, or in the current of a river, 20 minutes is quite long enough, as the temperature of the body is lowered more rapidly where the water is in motion. Whenever cold bathing is followed for several hours by coldness of surface, blueness of lips, feeble pulse, headache and weakness, its use should be discontinued. Such symptoms you will see in the weakly and debilitated: the reaction or glow is imperfectly effected, and the cold bath acts injuriously. These same symptoms will follow remaining in the water too long.

4. Do not cool off before going into the water, you require all the heat in your bodies to secure a vigorous reaction. You will hear of people strenuously warning bathers to cool off before bathing. This idea has long ago been exploded. There is no danger but positive benefit in plunging in at once. There is danger, however, when the body is fatigued, or chilled from exposure.

5. When ready for your bath, do not dance

alongside of the water, afraid to go in, but dash right in, and immerse your whole body quickly two or three times, so that you may have the shock quickly distributed over the whole surface. To prevent headache dip your head several times as well.

6. When your bath is finished, dress quickly after having a good rub down with a rough towel ; a regular curry combing, it should be.

Do not loll about after this, but take some exercise, a short sharp walk ; or if it be before breakfast, with the precaution stated, get it immediately. If your bath has been properly taken, and you have been in condition for it, you will find your appetite has been increased.

7. When in the water, keep in motion, by swimming, if you are a swimmer. I am surprised there are so few young men able to swim, as it is one of the best of exercises, for all the different sets of muscles must act in concert. I hope, some day, we will have well-established bathing houses in the city, where a man can learn to swim and have elbow-room to do it in, instead of being content with a sponge-down.

In the art of swimming man does not compare favorably with most animals. If a dog falls into the water, he swims at once, perhaps, awkwardly at the start off, if he has not been often in the water, but he is in no danger of drowning. Put his master ignorant of swimming in the same position ; what would become of him. He would soon drown. Every young man and young girl should learn to swim. Putting aside the question of health and the pleasures attached to it as an exercise, it should be the duty of every parent to see that their children are taught swimming. Lives have been saved by it, and history is only too full of sad accidents, even when close to shore, where the inability to swim has resulted in great loss of life.

Another item, Mr. Chairman, that may be spoken of in connection with camping out and the other out-door sports is the use of alcohol. This is a subject of burning interest to the community, and one doubly so to physicians who are acquainted with the inner life of society. They see every day of their lives fine young men with splendid prospects ahead of them going to ruin, and prosperous men of business becoming beggars, but more than this, they see also the slow insidious inroads of disease making havoc of strong constitutions by the immoderate use of alcohol. What a man has to say upon this subject should be said

with deliberation and judgment, to give no uncertain sound as to his meaning, and at the same time abstain from the rantings of some paid temperance lecturers. Now, I am speaking to young men to-night, and I can honestly say that no young man in health, and capable of indulging in out-door sports, requires alcohol any more than he requires castor-oil. I am quite certain you do not like the latter, nor will you the former unless you give yourselves the appetite for it. Alcohol is a stimulant only to be used when occasion requires it.

The medical profession are blamed for prescribing it wholesale in almost every case that comes under their notice, thereby aiding and abetting drunkenness. This, gentlemen, is hardly the case, as medical men are as careful in prescribing alcohol, when necessary, as they are of any article in the *Materia-Medica*, you will hear, however, of tipplers, of people who are fond of their glass, excusing themselves for their indulgence on the plea that they were advised to do so by their physician, who more than likely was quite innocent of any such instruction ; in this way telling a falsehood to shield a sin. I repeat, young men in health do not require alcohol at all. It will not give you strength, it may stimulate you for a few minutes, and then you feel the worse for it afterwards. A little bit of personal experience will make this better understood. A few years ago, when the Canada Central Railway went no further than Renfrew, I started on my usual Autumn trip for the woods. I arrived at Renfrew late in the evening, and found the stage did not leave for Eganville, 26 miles distant, until 3 o'clock next afternoon. As I did not care to loiter about the village three-quarters of a day, next morning I unpacked my gun, put some cartridges in my pockets, and started to foot it, leaving instructions for my baggage to be sent by the stage. It was in October, and the roads were muddy. When I had made about 8 miles, I found I was not so fresh as when I started, and just at this place there was a tavern. I thought I would have a smile. I went in and did take a smile, and I felt good all over. I had still 8 miles to make to reach Douglas, where I intended to get my dinner. The first two miles I made in splendid style, and I congratulated myself upon my prudence in smiling, but after this I began to fag rapidly, and anyone to have seen me toiling up the steep hill entering Douglas, would have seen a most forlorn, tired-out individual without any trace of a smile about him. I am positive that that glass

of whiskey, call it a smile if you will, did me harm. It simply acted as a goad to flagging powers, as I was not in training for a long tramp.

Now, the habitual use of alcohol during training is injurious and should be forbidden; it should be equally so in your out-door sports. A cup of coffee you will find much more to the purpose, as it is both stimulating and nourishing. I do not wish you to consider me a temperance lecturer, far from it. I am speaking as I feel. I am convinced of the truth of what I have said. A young man in health indulging in out-door sports does not require alcohol. It detracts from the benefit to be derived from them. You may ask, however, what are we to do if, supposing we are in training for a snow-shoe race, we feel depressed, and are forced to exercise more will-power to continue the same exertion. My answer is, you are over-training, relax your work; taking alcohol will be the same as whipping a tired-horse. In the bracing climate of our country men in training do not require spirits. Most of you will remember the Red River Expedition, under Sir G. Wolsely, the heavy work accomplished and the hardships endured, and yet there were no alcoholic rations, tea being supplied instead, and there was no sickness beyond a few cases of diarrhoea.

Now, Mr. Chairman, my duty is done, and I would be sorry if any should consider I have spoken too forcibly on any one point, but at the present time people are very apt to run to extremes. To-day, they are red-hot Radicals with explosive ideas, pulling down time-honored structures, and replacing them with fantastic theories; to-morrow, they are ardent Conservatives, seeing nothing but a high tariff and a national policy.

It is prudence and moderation I wish to counsel in all out-door sport. We cannot do without them, we must have them, and it is only by the wise use we make of them that they will give us pleasure and health.

TUBERCLE-BACILLUS.

A convenient method of demonstrating it in Sputum.

By PROF. DR. P. BAUMGARTEN.

(Translated by Dr. Wilkins, Professor of Physiology
Bishop's College, for MEDICAL RECORD from
Centralblatt f. d. medicins. Wissens.)

The modification suggested by Ehrlich of the staining method discovered by Koch for the demonstration of tubercle-bacilli* has been recognised on

all sides, amongst the first by Koch himself, as an important improvement in the method of examination of the bacilli met with in tubercle. Notwithstanding this, Ehrlich's method still does not appear sufficiently simple and rapid not to excite the desire to discover a still more convenient and rapid proceeding for the demonstration in practice of the fungus of tubercle.

In section preparations, the potash method proposed by me leaves nothing to be desired in the rapidity of its performance, and is scarcely inferior in certainty to the staining method. In preparations, however, in which the accidental occurrence of various other kinds of bacteria are to be feared, or cannot be avoided, as for example in phthisical sputa, the simple potash method is not sufficient,—even for the most practised—at least in many cases. On the other hand, I believe I have found a procedure which even in the last named cases rapidly and surely effects its purpose—a combination of the potash method with staining by means of an aniline dye which usually stains nuclei. Dry preparations of phthisical sputa are prepared according to the instructions given by Koch and Ehrlich, and moistened with very diluted solution of caustic potash.* The tubercle-bacilli present in the preparation can then be seen in the clearest manner without further preparation by means of a magnifying power of 400 to 500 diameters. Through slight pressure on the cover-glass the bacilli can be still more freed from the surrounding tissue-detritus.

In order to exclude the possibility of mistaking similar shaped bacilli of a different species for tubercle-bacilli, the cover-glass should be lifted from the side and be placed to one side sufficiently long until the layer of fluid adhering to its under portions has been dried; this takes place in a few minutes. The cover-glass is now passed two or three times through a gas flame, and a drop of an ordinary watery solution of aniline violet, diluted but not too light in color (or of some other aniline dye which stains nuclei) is placed on the preparation. All bacteria resulting from decomposition now appear intensely blue; the tubercle-bacilli, on the contrary, are absolutely colorless, and can be seen as readily as in the simple potash preparation. The whole procedure requires not more than ten minutes, and may prove useful in practice.

* 1-2 drops of a 33 per cent. solution of caustic potash in a watchglassful of distilled water.

Progress of Medical Science.

DIABETES INSIPIDUS AND DIABETES MELLITUS.

By HARVEY L. BYRD, M.D.,

President and Professor of Obstetrics, etc., in Baltimore Medical College, Baltimore, Md.

The following cases can hardly fail to interest your readers, as they present, by comparison and contrast, the more salient points in the differentiation of the two varieties of diabetes, and the treatment that was successful in each. The family history in both cases appears to have been good, and there were no evidences of acquired predisposition to the disease, either specific or otherwise; and both were young men of originally good constitution, and engaged in active outdoor occupations. They may be regarded as typical cases in more respects than that which the names would seem to imply, and I shall therefore endeavor to bring out their individualities and distinctive features in as prominent outline as the brief space I have allotted to myself in this communication will permit.

Case I. was a man a little over 20 years of age, and of originally good constitution. His average flow of urine exceeded nine pints daily, of a specific gravity of 1005, without albumen, entirely devoid of sugar, and of slight acid reaction. While in the enjoyment of excellent health he discovered a gradual augmentation in the daily flow of his urine, which went on for some weeks without producing any appreciable evidence of ill health, although he soon found that "his clothes were growing too large" and his appetite was not so strong as formerly. He observed after this that he was losing flesh quite rapidly, and his desire for good, nourishing food grew daily less and less. In five months and a half after his attention was called to the increase in the urinary discharge, he found himself greatly emaciated and so much debilitated as to be scarcely able to walk across the room without assistance. He stated positively that he had never suffered from venereal disease, and had at no time during his recollection received any serious injury to the head or spine, or, in fact, in any part of his body. A careful examination of the heart, lungs, stomach, and bowels revealed no lesion of either of them. He suffered from occasional constipation, but his digestion remained moderately fair, and the thermometer revealed little or no departure from the normal standard. He seemed not to be remarkably thirsty, and, though complaining of some feeling of uneasiness in the small of the back, declared he experienced no actual pain in any part of the body. Opportunity was afforded for observing the difference between the amount of fluids he received into his

stomach and that which was passed from the bladder, and they were in striking contrast. Thus, for example, he took into the stomach of fluids of all kinds six and a half to seven measured pints in twenty-four hours, and passed from nine to ten measured pints in the same length of time. These measurements were made and continued for a period of six days, and the resulting discrepancies were uniformly the same. Various articles of diet were used, in order to test their effects, if any, upon the urinary secretions, but without obvious results. His bowels were regulated with the vegetable cathartic-pill compound and elix. bromide of potassium in four-drachm doses, ordered at bedtime to procure sleep and remove restlessness, of which he sometimes complained; and he began taking drachm doses of fluid extract of ergot *ter die*. The quantity of ergot was increased to a drachm four times, and finally six times, in twenty-four hours, until the beginning of the fourth week, when it was reduced to the original amount per day, in consequence of the urine becoming reduced to three and a half pints in twenty-four hours. The bromide was diminished after the first week, and omitted entirely by the end of the second week, and a cathartic pill given *pro re nata*. The ergot was still further reduced in quantity until the end of the fourth week, when it was suspended entirely. At this time the appetite was good, and the general appearance indicated a return to perfect health. The urine was normal in quantity and quality.

Case II. (diabetes mellitus).—Male, between 35 and 40 years of age, laborer, and until a few years ago enjoyed excellent health. About a year ago his appetite was found to have increased very considerably, and with it his thirst was greatly augmented. Notwithstanding, he discovered he was losing flesh. The urine was light and clear and greatly increased in quantity, so much so as to necessitate his passing it five to six times a night; and it was shown by measurement that he voided from twenty-nine to thirty pints during twenty-four hours. He complained of muscular pains and some stiffness in the joints, but the suffering was inconsiderable from these causes. The first examination showed a specific gravity of 1031 and a considerable quantity of sugar. His bowels were opened with mass. hydrarg. and ext. colocynth. comp., each six grains, at night, and castor oil the following morning; and after its action, salicin and bicarb. soda, aa five grains every four hours. Ten days after, the quantity of urine passed in twenty-four hours was thirty-two pints, and contained thirty-one and four-tenths ounces of sugar, and he weighed one hundred and eighteen pounds. The use of salicin and soda was suspended, and arsenic, lactic acid, and opium in large doses were substituted separately and successively, and continued for twenty days, with varying advantage,—i.e., the quantity of urine and amount of sugar increasing or lessening from time

to time, until the former reached forty pints and the latter thirty-two and two-tenths ounces in the twenty-four hours. From the very favorable reports of the effects of codeia in diabetes mellitus the foregoing articles were abandoned and the latter ordered in three-quarter-grain doses three times per day. In a week it was increased to one grain, and in ten days to one and one-half, and in two weeks to two grains t. d. At the end of third week the dose of codeia was reduced to one grain morning, noon, and night, as the amount of urine was nearly normal, the sugar had disappeared almost entirely, and the patient's thirst and dryness of skin had ceased to trouble him. His digestion had improved and his weight increased several pounds in the next fortnight, so that the dose of codeia was still further reduced to one-quarter grain t. d. During the treatment of the case a dose of mass. hydrarg. et ext. col. com., as at first, was given twice a week, and a tepid salt water bath, with the moderate use of the flesh-brush, resorted to once or twice per week until he was entirely well.

In the above typical cases two therapeutic agents stand forth as prominent factors,—viz., ergot in the insipid and codeia in the saccharine variety of diabetes. The effects of these agents, respectively, in the two forms of the disease, after the use of other remedies of recognized value had been productive of but little, if any, advantage, increase their claims to the consideration of the profession. Much credit is due to Prof. Da Costa for bringing ergot so clearly before the faculty. *Phil. Med. Times.*

THE GERM OF TUBERCULOSIS.

The organism of tubercle has hitherto eluded research. Its discovery is at last announced by the distinguished worker to whose investigations much of the progress of bacterial pathology has been due, Dr. Koch, who gave a description and demonstration of the organisms at a recent meeting of the Physiological Society of Berlin. It is only by means of a special method of preparation and examination that the objects can be detected. The method consists essentially in a process of coloring, which has been found necessary for the detection of these organisms, and in their examination under very strong illumination. But the details of the method have to be varied according to the tissue examined, whether a secretion, blood tissue fluid, or a section of an organ or tissue. If, for instance, it is desired to demonstrate the presence of the tubercle-bacilli in the fluid of the tissues, a thin layer of this is spread over a cover-glass. It is then dried and warmed for a few moments over a flame, so as to render it insoluble; it is then placed in a mixture of one cubic centimeter of a concentrated solution of methylene-blue in alcohol, two-tenths of a cubic centimeter of a

ten-per-cent solution of potash, and two hundred cubic centimeters of distilled water for twenty-four hours. The preparation is by this colored blue, and on it is then placed a few drops of a solution of vesuvin. This has the effect of discharging the methylene blue from all the tissue elements, but not from the bacilli. The former are of a brown color, and the blue bacilli are conspicuously defined. The preparation is then treated with absolute alcohol, oil of cloves, and Canada balsam, in the ordinary manner. This peculiarity of being rendered visible by the combined action of methylene blue and vesuvin is possessed only by the tubercle-bacilli and by those of leprosy. All other bacteria and micrococci known to Koch lose, under the action of vesuvin, the blue color which they acquire from methylene-blue.

The bacilli of tubercle, when rendered visible by this method of double coloration, are seen as very small rods, in length about one-third the diameter of a red blood corpuscle, and in breadth about one sixth of their length. In some of them distinct spores may be seen, as minute, unstained, refracting, vacuole-like structures, distinguishable, however, from the vacuoles in that at their position there is a slight fusiform enlargement of the bacillus. They are most abundant in recent tubercular neoplasms and least numerous in the caseating centre of old miliary tubercles. They are also visible within the giant cells, usually isolated, but sometimes forming well-marked sheaf-like bundles. Koch found the same organisms in the walls of tuberculous cavities, in the sputum of phthisical patients, in degenerated scrofulous glands, in fungous joints, and in the bones of tuberculous cattle. They were never absent in the tubercular new formations produced by inoculations, even in animals of the most different species.

In order to ascertain the all-important question whether these organisms are actually the *materies morbi* of tuberculosis, Koch has carried on an extensive series of culture-experiments, which have yielded the most striking results. As a culture-liquid, he employed sterilized blood-serum from the ox. The sterilization was effected in the method recommended by Tyndall, by placing the serum in a test-tube closed with a plug of wadding, and exposing it for an hour on each of several successive days to a temperature of 58° C. After this had been repeated for about six days, the temperature was raised to 65° C., and the previously fluid serum became transformed into a yellowish, translucent, but slightly opalescent, mass of the consistence of coagulated gelatine. Its translucency permitted the growth of organisms, either on its surface or in its depth, to be readily recognized by the resulting opacity. In order to increase the area of the free surface of this culture-soil, it is recommended to incline the test-tube at the moment of coagulation. A small fragment of excised tissue was introduced into a tube under special precautions to avoid contamination with

ordinary bacteria of putrefaction. Fresh miliary tubercle answers best, taken from an animal affected with inoculation-tubercle, and killed shortly before. If the glass is kept at a temperature of 37° or 38° C., at the end of about ten days the first effect of culture is observable as fine white points and streaks on the surface of the serum. Fresh glasses may be inoculated from this first culture; and so a series of generations may be obtained. Some of these series of cultures were continued for two hundred days. Under the microscope these grayish-white masses on the surface of the serum are found to consist of precisely the same bacilli as can be demonstrated by means of the method of double coloration in the primary tuberculous tissue. If a small portion is inserted into the anterior chamber of the eye of an animal, is injected into its blood, or inoculated beneath its skin, there results a widespread tuberculosis of almost all the organs and tissues that has a more rapid course than when the inoculation is made with ordinary tuberculous material. The first symptoms are to be observed in guinea-pigs ten days after the inoculation. Even animals which enjoy an almost complete immunity from tuberculosis, such as dogs and rats, are affected rapidly and with certainty. In some of the animals which died after these inoculations the amount of tubercle developed in the tissues was enormous, being hardly ever equalled in the human subject.

These experiments seem to demonstrate that the organism which is revealed by the method of double coloration is really the pathogenic element of tuberculosis. The researches appear to have been conducted with admirable care. The experiment will no doubt be soon repeated. Indeed, in the brief interval which has elapsed since the demonstration by Koch, on March 24th, his observations have received independent confirmation by Baumgarten, who has published in the *Centralblatt für Med. Wiss.* an account of his observations. In every new formation of artificially-produced tuberculosis in the guinea-pig he found innumerable quantities of the rod-shaped bacteria infiltrating the area in diminishing intensity from the center to the circumference. As far as the tubercular growth can be traced the bacterial infiltration extends. His description of the organisms closely agrees with that of Koch, but he observed that the extremities of the rods frequently presented a knob-shaped or wedge-shaped enlargement. They were very rarely united in pairs, and never massed in the so-called zooglea form. He corroborates their characteristic of resistance to the ordinary methods of tinting, and only succeeded in bringing them into distinct view by dilute alkalis. In a postscript Baumgarten adds that he has succeeded in finding the same organisms in human tubercle. The pathological importance of the discovery of the proximate cause of this frightful scourge of the human race cannot be over-estimated; nor is it possible to fore-

tell the practical results to which it may lead.—*The Lancet*.

DIABETES ITS TREATMENT.

E. A. Cook, Ph.D., L.R.C.P. and S.Ed., L.F.P.S.G., writes to the *Practitioner* that:

Whether the primary lesion in diabetes has been caused by sudden imbibition of cold liquid, or in some other way, it is certain that the quantities of liquid habitually consumed by diabetics must be very hurtful to digestion. The peptic glands would pour their secretion into a mass of diluting fluid, but little food could be rendered fit for absorption, and this fluid is absorbed, carried by the veins partly to the general circulation, partly to the liver, and thus the blood must be constantly diluted. In treating such cases we must endeavor to decrease the water consumed. This is very difficult to effect while so much urine is passing away, for if the patient denies himself liquid by force of will, a kind of ravenous state sets in, and life is unbearable. While the sugar is constantly produced it must be as constantly eliminated, and to effect this by the kidneys a certain amount of water is necessary. The state of the case in such patients seems to necessitate a choice of evils. If you seek by drugs or by deprivation of fluid to diminish the amount of urine, sugar accumulates in the blood. If water be allowed in the quantity required, the patient dies from want of nutrition, because the digestive organs are unable to act, and the blood is depleted of other life-sustaining substances.

In dealing with these symptoms we must not neglect the morbid physiological states produced by them; we must not hope for permanent improvement by administering drugs which increase morbid conditions. If in a disease like phthisis it is so well recognized that opiates are prejudicial in consequence of their action in disordering the stomach, how much more strongly should this fact be borne in mind in the treatment of diabetic symptoms? Doubtless a temporary apparent improvement is sometimes manifest from their use, but it is at the cost of a real decline in vital power; or if a real improvement is effected, it must be by some occult special action on the special lesion in these cases, and no generalization can be made. The diabetic symptoms in the order of their importance, when well established, are: 1. Excessive thirst; 2. Constipation; 3. Lack of digestive powers; 4. Twitching of muscles, especially those of the lower limbs; 5. Weakness; 6. The excretion of excessive urine and sugar; and it is in this order that treatment is most urgently demanded.

Any one who has watched a well-marked case will not need to be convinced that it is of the utmost importance for the comfort of the patient that the hard dry tongue should be kept moist, and if the orifices of the salivary ducts are examined

they will be found dry also. The drugs which are known to increase salivary secretion are mercury, nitro-hydrochloric acid, and pilocarpin. The first is in most cases inadmissible; the second is of some value, but pilocarpin is the drug suitable above all others. When administered in one-fifth to one-third grain doses its general effect is most powerful, and such an administration in diabetic cases would be hurtful; but if a minute dose be applied locally and repeatedly, the mouth can be kept moist. If the nitrate be dissolved in dilute spirit, so that five drops shall equal one-twentieth grain, and if this quantity be placed every four hours between the lip and the gum, in a short time a great improvement will be apparent, and as this proceeds the dose can be reduced to one-half with advantage. The general effect of this treatment is that the patient demands less liquid.

I have been present at four post-mortem inspections of diabetic patients. The deaths in all four had been sudden, and in all four the intestines presented evidence of most marked constipation, the feces in the lower bowel being exceedingly hard. I do not remember a single case of diabetes in which marked constipation was not a symptom; when it was relieved the liquid taken and excreted was diminished, but the relief was often not possible by ordinary doses or measures; and I have learned that when this state is neglected there is some marked danger of sudden death. An enema passed high up the rectum and of large amount is the most satisfactory method of treatment until a general amendment commences, when this symptom diminishes.

When the diet of a diabetic patient is made to consist almost wholly of non-farinaceous material it is especially necessary that the digestive arrangements be in as good order as possible, and so much the more is this the case if the greater portion of the diet be milk. It is no uncommon thing for a diabetic to drink four or five pints of liquid at once. This must distend the stomach and weaken digestion. The peptic glands may be paralyzed. The best remedy for this state is to give with all meals pepsin and hydrochloric acid, and to allow no liquids for some little period previous to the meal. In the majority of cases a marked improvement will soon follow this line of treatment—the bodily weight will increase, the constipation will often entirely disappear, and the desire for fluids and the consequent polyuria be diminished.

The urine excreted contains, besides sugar, mineral salts, and when we consider the amount draining away it must at once appear most appropriate to administer some material suitable to replace this drainage. Phosphates are the most essential, and a solution containing no sugar will be required. The following I have prepared in large quantity and administered with much benefit:

Bone-ash of femur.....	1040 gr.
Phosphate of magnesia.....	800 gr.
Phosphate of potash.....	1900 gr.
Phosphate of soda.....	3520 gr.

Syrupy phosphoric acid q.s.
Water, to..... 64 oz.

Powder the bone-ash and add four ounces of syrupy phosphoric acid diluted with an equal bulk of water; add the phosphate of magnesia, and leave for twelve hours; dilute with water to forty ounces and filter; dissolve the phosphates of potash and soda in water and add to the clear filtrate; add sufficient phosphoric acid to redissolve any precipitate formed, and make up the bulk to sixty-four ounces. Dose, one dram thrice daily in water.

When the above-described methods of treatment are followed out, the patient suffering from diabetic symptoms has a rational prospect of improvement. The twitching of the muscles, the weakness, the polyuria, may be neglected; they will disappear, as will also the melancholia, the impotence, and the wasting. The sugar in the urine I have never known to disappear entirely, but always to diminish in quantity. It may be there are cases of disease presenting diabetic symptoms in which the whole of the above method of treatment would be of no avail, but I have never seen one in which improvement did not take place if it were used before the last stage of exhaustion had set in; and when recovery has to a certain extent taken place it is not necessary to rigidly enforce it for fear of a relapse.

THERAPEUTICAL ACTION OF ERGOT.

John Dewar, L.R.C.P., etc., in the *London Practitioner* for May, makes the following observations on the therapeutical action of ergot:

From its action on the circulation and the nervous system it is evident that ergot possesses a wide therapeutical range. In mentioning a few diseases in which I have found it useful I would place at the head of the list *pertussis*. I am aware that in this disease a vast number of remedies are useful; but after a pretty extensive trial, both in hospital and private practice, I am inclined to regard ergot as best and safest... Ergot seldom fails to cure whooping-cough in from one to three weeks. The cases that are longer in getting better are those complicated with bronchitis or with troublesome bronchial catarrh. I give from four to fifteen minims of the liquid extract every three or four hours to children of three months and upward. The benefit of the secale is at once apparent, the fits of coughing occur less frequently, and are not so severe when they do occur. I usually give it alone with a little sugar, but in complicated cases it may be combined with other remedies, and especially with the compound syrup of the phosphates to complete the cure when there is debility...

Of its power to cut short the disease there can be no doubt, whatever be the theory of its action. This I have in scores of cases proved; nor is it necessary to give cases in detail, as all the cases would simply show a daily declension of the dis-

ease until, at the end of a fortnight or three weeks, the cough quite ceased. But in some cases the cough returns when the medicine is left off, so it may have to be continued for two or even three months; this, however, is the exception.

The power of ergot upon whooping-cough throws some light on its physiological action. Indeed clinical or therapeutical observation often aids physiological research, though without experimental (vivisectional) investigation the therapist would be in hopeless darkness. Its action in whooping-cough appears to me to favor the theory that the sensory peripheral endings only are affected, as central anemia of the cord from constricted vessels could scarcely account for the *speedy* antispasmodic action of the drug, though later on it may have something to do with the bringing about a cure.

On the uterus. On the parturient uterus every one has tried the effects of ergot; yet obstetricians are frequently disappointed in its action, so much so that many say it is useless; and I suppose every one has felt it to be provokingly uncertain, even in a most suitable case—a well-advanced labor, free from mechanical obstruction, a dilated or dilatable os, and a multipara. In vain are large and oft-repeated doses given—the sluggish uterus will not act. Whether it be the only one or not, I know one cause to be inertness of the drug. After a pretty extensive trial of powder, tea, tincture, and liquid extract, I have found the best results from the liquor secale ammoniata, when well prepared. Let one typical case suffice: Mrs. M. in labor with her seventh child; usually *very* quick. Visited patient at eight o'clock in the morning. She had been in labor all night, during which time the membranes ruptured. Pains very feeble; os dilatable and as large as the mouth of a teacup. Went home, returned about twelve o'clock, and found her much in the same condition. I then gave one dram liq. sec. ammon. (Ferris). In thirty-five minutes sharp pains came on, and in another fifteen minutes the child was born. Placenta came away easily. In this case the labor had lasted eighteen hours. In cases where I have given a dram and a half of the secale for a dose, violent uterine contractions have taken place, expelling the child and retaining the placenta for some time by hour-glass contractions. This retention of the placenta I have frequently found after giving large doses, but not with dram or half-dram doses.

Has ergot any action on the unimpregnated uterus, or on the impregnated before parturition has commenced? As far as my experience goes, ergot has no appreciable effect on the impregnated uterus when given in therapeutic doses. On the unimpregnated uterus its action is not very marked, unless it be given for a lengthened period. In subinvolution and in chronic congestion and enlargement the cavity of the uterus—the sound being judge—does not become diminished by the action of secale alone, but, with rest and other remedies, it helps. I have not much faith in its action on uterine fibroids. If they are submucoid, ergot will

assist their enucleation after an incision has been made. But it is too much to expect from a remedy that a tumor of any size will have its blood-supply so cut off as to destroy the growth, or to cause enucleation by contractions. In such cases however, it will assist natural efforts of expulsion when such has commenced.

Theoretically, ergot should have some effect upon all hemorrhages, congestions, and atonic conditions of the system. In hemoptysis it has been highly spoken of, but my experience of it in that disease is small, as I have found such good results from the tincture of hamamelis that I seldom use any other remedy. Again, it is constantly used alone or combined with sulphuric acid in menorrhagia, metrorrhagia, and with more or less success. So also in leucorrhea and galactorrhea, although I have not found it of much use in preventing or cutting short mammary abscess.

In atonic and enfeebled conditions so often met with in women, where anemia is associated with a weak heart, inertia, etc., ergot, combined with tincture of iron, often acts better than strychnine and iron or digitalis and iron. Allbutt has used it with great benefit in men who are worn out from worry, and who need bracing up. So with children, I have found it in some cases a useful adjunct to the compound syrup of the phosphates where the latter is indicated.

In diarrhea several writers have spoken highly of ergot, but in my hands it has invariably failed; indeed it has always increased the diarrhea, and this, from its action upon the muscular fibres of the intestines, is what one would expect. Any theoretical advantage to be gained by contraction of congested vessels in the mucous membrane is more than counterbalanced by the increased peristalsis. In a typical case of chronic diarrhea which I had under my care a short time ago, and which continued for months despite every kind of treatment, I gave some ergot; but the patient could not be persuaded to finish one bottle, as he said it made him "worse than ever." The diarrhea was due to muco-enteritis, and the case did well on large doses of bismuth. In children who have been taking ergot for some time diarrhea frequently sets in. This is the only bad effect I find from its prolonged use—two or three months—in children; and when it is given in ordinary therapeutical doses, five to ten drops every four or six hours, it may be continued for a very long time without doing harm.

The action of ergot upon the spinal cord is well known, but in congestion of the brain in children I have been most unfortunate in its use, even in large doses. In some of my cases, however, there was a suspicion of tubercle.

The following case, which was under my care a few weeks ago, may be looked upon as illustrating the speedy action of ergot upon what appeared to be localized congestion of the chord: A little boy aged four and rather delicate, was suddenly seized with what his mother thought a slight convulsion,

in which he threw his head back, rolled his eyes, etc. Upon recovering he lay with the back of his head almost touching his spine, and he was in that condition when I saw him. On attempting to bring his head forward he strongly resisted and screamed. In this state the child lay for a fortnight, appearing to get worse, for, besides his head being retracted, when he was held up his legs were found to be powerfully flexed on his thighs, and they could with difficulty be straightened. Iodide of potassium and various other internal and external remedies were used for a fortnight without the slightest effect. I then gave him ten minims of liq. ergotæ every four hours. In two days he showed symptoms of improvement, which continued until, at the end of a month from the commencement of the attack, he had recovered. During the last week the compound syrup of the phosphates was added to the secale. There are several interesting points connected with this case, but I am only concerned here with the action of the ergot.

The only other affection I shall mention where ergot seems to be useful and deserving of further trial is nasal catarrh. This troublesome complaint, which has hitherto resisted all remedies, if taken in its early stage may be cut short by a full dose of ergot, repeated if necessary.

BORACIC ACID POWDER FOR GRANULAR LIDS.

By JAMES L. MINOR, M.D.

Assistant Surgeon to the New York Eye and Ear Dispensary, etc., New York City, N.Y.

The intractable character of many cases of granular lids furnishes ample means of testing the action of any medicine supposed to be useful in their treatment; and the benefit frequently accruing from a *change* in the application of a remedy which has been used for some time suggests the propriety of placing additional agents at our command in the treatment of a disease, at once so common and so obstinate. And having been impressed with the beneficial effect of powdered boracic acid upon succulent granulations in the ear, it occurred to me that it ought to be used with advantage in certain forms of granular lids; and, too, recalling the old Belgium treatment of pulverized acetate of lead in this affection, I decided to use boracic acid for the same purpose.

The cases selected for this treatment have been chiefly those in which the papillary granulations stood out as prominent fleshy masses, with deep inter-papillary crevices, and accompanied by scanty serous secretion.

I have used the pulverized acid as follows: The lids being thoroughly everted, the powder is spread freely over the whole conjunctival surface with a camel's hair brush. The acid is generously ap-

plied, and mixing with the discharge from the lids, it readily gains access to the cracks and crevices between the granulations, and thus comes into direct contact with the entire surface upon which it is desired to act. The immediate effect is to increase lachrymation and to cause a burning, gritty sensation, with some pain. These symptoms usually pass off within ten minutes, and are followed by an amelioration of all the symptoms which existed before the application of the acid. The granulations may look less gorged and prominent, but I have been able to discover little change in the naked eye appearances of the conjunctiva after a single application of the powder. The powder was used three times a week, because the patients were seen at the hospital clinic which I attended tri-weekly, but there are no indications that it should not be used daily. I commenced this mode of treatment nearly six months ago, and attempted to keep a record of the cases so treated, with an idea of tabulating them and formulating the results, but to no purpose, for the slight degree of change noted, from time to time, resolved itself into gradual but steady improvement, without any remarkable leaps to a successful cure. In this respect boracic acid only resembles other agents used for the same purpose. It is, however, less painful than the ordinary caustic or astringent applications, and in my hands has given a more satisfactory result; and patients who have received this treatment frequently ask to have "the white powder" used again, as being less severe in its action, but more potent in affording relief than other applications which have been made. I have used it with success in various forms of granular lids and trachoma; and in one case of indolent corneal ulcer associated with granular lids, marked and immediate improvement followed the boracic acid treatment.

The abundant serous discharge which follows the direct application of boracic acid is only partly due to the conjunctival irritation caused by its presence; on granulation tissue in the ear and on indolent ulcers elsewhere, it occasions a free serous flux when it is used. Whether an osmotic current is established or not, it is certainly a fact that succulent tissue is relieved of its superabundant serum, and thereby contracts. Hence boracic acid may be looked upon, to a certain extent, as a *depurative* to such tissues; but whether its beneficial effect is to be ascribed entirely to the relief of circumvascular pressure, thereby favoring a return to a healthy circulation and normal nutrition, or to additional curative action, are questions to be decided by further investigation. It is certainly to be anticipated that a cure effected by such a remedy as boracic acid will leave the conjunctival membrane in a healthier condition than is seen in cures resulting from the use of caustic applications.—*Virginia Medical Monthly*.

ON LINIMENTUM CROTONIS IN THE TREATMENT OF ACUTE BRONCHITIS.

Dr. R. Park, of Glasgow, Scot., contributes a paper to *Practitioner* in which he calls attention to a line of treatment which he says has been invariably successful in his hands during the last five years:

As soon as the patient comes under treatment, the chest, in whole or in part, is to be rubbed with two or three drams of lin. crotonis. If the patient is seen at the very earliest stage, when there is only a slight roughness and pain behind the sternum, then it will be enough to have it rubbed into the episternal hollow, along the clavicles, and down the front of the sternum as far as the ensiform cartilage. Otherwise the whole front of the chest, the sides thereof under the armpits, and the back between the shoulders should be rubbed. The best manner of application is by means of a tag of cotton wool saturated with the liniment and rubbed till it is dried up. Care should be taken, and the patient warned, not to let the liniment *run* down the loins and abdomen, which it is apt to do. Also the applying hand should be carefully washed *immediately* afterward. The application *at once* relieves the patient, and this relief is maintained and increased by having the surface rubbed covered over with a thin layer of absorbent cotton wool, properly retained to prevent shifting. For this purpose an old chamois leather vest answers well.

From repeated personal experience I know that the liniment applied in this way does not produce pain. Sometimes, after twenty-four hours or so, there is a feeling of tenderness or soreness; but if the cotton wool be not disturbed, and violent rubbing be not resorted to by the patient, this soreness is evanescent, and succeeded by an itching, sometimes very considerable, which remains for three or four days. It may be relieved by smearing the eruption over with fresh butter, lard, or vaseline *under the cotton wool*, care being taken, however, not to disturb the cotton where it has become adherent with discharge.

It is this persistence and continuity of effect which makes the application of such signal value, more especially for children and infants. So long as the irritation lasts, so long does the derivative action continue. But it has another great advantage, namely, that it enables the patient to go about his business. There is an impression abroad that it is dangerous for a patient to expose himself out of doors with an eruption such as that of lin. crotonis out upon him. Such an impression is quite erroneous. There is another prejudice against applying it to infants. I can only say that I have had it applied to scores of infants under twelve months, and have never once regretted the practice. On the other hand, I can remember many a time regretting having ordered a poultice under similar circumstances. For the relief of the cough I have prescribed this mixture, which has answered well:

℞ Acidi. hydrobromici, M lxxx;
Vini ipecac., M c;
Tinct. belladonnæ, Mxl;
Acidi hydrocyan. dil., Miv;
Syr. Scillæ, 3 jss;
Glycerini, q.s. ad., ʒ ii.
Ft. Mist. Cujus cap. coch. min. j. 2 dis. horis.

THE LARGEST MAN IN AMERICA.

The largest man on this continent was the late Lewis Cornelius, of Pike County, Pa. He was considerably larger than Daniel Lambert. Mr. Cornelius' dimensions are entered upon the record books in the Prothonotary's office at Milford, Pike county, as follows:—

"Lewis Cornelius.—Born 1794.

"Height, 6 feet.

"Circumference below waist, 8 feet 2 inches.

"Circumference above waist, 6 feet 2½ inches.

"Circumference of arm above elbow, 2 feet 2 inches.

"Circumference of arm below elbow, 1 foot 9 inches.

"Circumference of wrist, 1 foot 3 inches.

"Circumference of thigh, 4 feet 2 inches.

"Circumference of calf of leg, 2 feet 7 inches.

"Circumference of ankle, 1 foot 7 inches.

"Weight, without any clothing whatever, 645½ pounds."

This is the only authentic record of Mr. Cornelius' size extant. As he had been sick some time he lost over 50 pounds of his weight. He was not weighed until after his death, and when in full health would have tipped the scales at 700 pounds. His wife was a very slight woman, and weighed just 100 pounds.—*Philadelphia Medical Reporter*.

THE TREATMENT OF RINGWORM.

A writer in the *British Med. Journal* says: The difficulty experienced in the treatment of ringworm is known to every one who has seen much of this disease. I therefore think your readers will be glad to hear of a remedy which I have recently used with complete success. Struck with the similarity that exists between the disease known in the East Indies as *dobzitch* and ringworm, and knowing how rapidly the former yields to the application of goa powder, I was induced to try the active principle of this substance, chrysophanic acid, in the proportion of one dram to one ounce of vaseline. The result has been the rapid destruction of the fungus, and consequently a complete cure. Chrysophanic acid has been recommended in the treatment of psoriasis, but I am not aware of it having been used hitherto for ringworm.

HERNIA RADICALLY CURED BY THE USE OF HYPODERMIC INJECTIONS.

Dr. J. H. Warren (*Med. and Surg. Reporter*) reports good results in the treatment of hernia of all kinds by the hypodermic injection of various fluids into the tissues in front of the hernial rings. For infants he uses an aqueous solution of oak bark; for children from five to fifteen, the extract of oak bark distilled to the consistence of glycerine, with ten drops of sulphuric ether to the drachm; for old or long standing hernia, congenital or otherwise, a solution composed of four drachms of the last mentioned article, one of sulphuric ether, one of absolute alcohol, with one or two grains of morphia. The syringe is made to hold two drachms, and the needle is spirally twisted and pierced with holes on the sides; the fluid is thus injected on the parts at right angles. This proceeding excites slight fever, and a certain amount of local inflammation. The parts become matted together in such a way as, in the great majority of cases, to effectually close the hernial openings. After the operation the patient should keep in bed for about a fortnight. The parts should also be supported for some time by a compress and bandage, or light spring truss. Over-exertion or great straining must be avoided for several months, till the rings are consolidated. Of twelve operations reported, all but three were perfectly successful.

SUPPOSITORIES OF ERGOTIN.

At a recent meeting of the Société de Thérapeutique (*Bull. Gén. de Thérap.*, vol. ii., 1880, p. 43) M. Dujardin Beaumetz stated that, following the example of a Belgian physician, he had attempted the employment of ergotin in suppositories to combat the metrorrhagia of uterine fibromata. These suppositories contained fifty centigrammes (eight grains) of ergotin,—that is to say, about five times the amount used in hypodermic injection. He had obtained excellent results in two cases, which had been cured in the first after two applications, in the second after three applications.

In the discussion following, M. Ferrand said he also had employed these suppositories in studying the influence of ergotin on hemorrhoids. One patient, among others, had been relieved of a persistent hemorrhoidal flux after the employment of eight or ten suppositories containing twenty-five centigrammes of extract of ergot. This patient had had no return of the flux after more than a month.

M. Vidal said he also had used these suppositories in the treatment of rectal prolapse. He was accustomed to use suppositories containing fifty centigrammes to a gramme of ergotin. The effect obtained had not been as satisfactory as in using hypodermic injections; besides which the patients

complained of a very painful burning sensation in the neighborhood of the anus.

M. Ferrand said the dose was not without importance, because of the great difference of sensibility which exists between the mucous membrane of the stomach and that of the rectum: thus, saline enemata which caused energetic and painful contractions of the intestines produced no such effect when introduced into the stomach. In the patient suffering with hemorrhoids, whose case he had reported last year, he had employed hypodermic injections of ergotin after having been obliged to give up suppositories of tannin, which had been badly borne.

M. Montard Martin believed that there existed an undoubted difference between the stomach and the rectum with regard to their relative sensibility; besides, the intestinal mucous membrane absorbs more easily, rendering it necessary to use smaller doses than by the mouth. The example chosen by M. Ferrand was ill-chosen, because the saline solution employed as an emetic also excites the gastric mucous membrane greatly; but chloral, so well supported by the stomach, often causes severe pain when given in enemata.

M. Dujardin Beaumetz thought that suppositories of ergotin were to be recommended as useful in uterine fibroid. They did not present the same danger as the parenchymatous injection of ergotin in solution into the uterus, which is sometimes followed by fatal peritonitis. The formula for the suppositories might be fixed, for example, as ergotin fifty centigrammes, ol. theobromæ five grammes.

M. Ferrand thought that if these suppositories gave pain they might be reduced in strength and repeated more frequently.

M. Blondeau had employed similar suppositories in a case of retention of urine, and had obtained good results.

TREATMENT OF INFANTILE DIARRHŒA BY POWDERED CHARCOAL.

Dr. Guérin, in referring to a recent communication to the *Académie de Médecine*, made by Boucharlat, remarks that for a long time he has been in the habit of combating infantile diarrhœa by mixing the milk in the suckling-bottle with charcoal powder. He usually adds half a teaspoonful of the powder to one bottle of the milk. The infants take the milk readily, and in a few days the greenish stools of the little patients change to a dark yellow, while their consistence becomes increased. In addition to the admixture of powdered charcoal, the milk is diluted by one-half or one-third of its bulk of sugared water. He has frequently seen intractable summer complaints yield in a few days to this treatment.

COD-LIVER OIL IN EPILEPSY.

Dr. Fairbairn, of Brooklyn, N.Y., writes: The digestive disorder and annoying and disfiguring eruption which result from taking the bromides in large doses for a length of time, are serious disadvantages connected with the administration of these salts. A remedy which will prevent the bad effects of a medicine, and at the same time will rather aid than detract from its good effects, is certainly a valuable one. I think in this case we have such a remedy in cod-liver oil.

A young lady suffering from epilepsy has been under my care for the past five months, who has taken bromide of potassium in large doses for nearly a year, and by this remedy cod-liver oil has warded off the above troublesome results. The mode of taking it was this: Brom. potas., 3 ss., was taken thrice daily after eating; this was followed one hour after each dose by ol. morrhue, 3 ss. When first attacked by the malady she had eight convulsions in the twenty-four hours. She began the bromide in 3 ss. doses, but was compelled to stop it on account of the gastric derangement. A friend recommended the cod-liver oil. She resumed the bromide, adding the oil, and has taken it without further trouble since. The eruption, before profuse, disappeared under this management. The disease has been well controlled, only four convulsions having occurred in the past seven months. I doubt not that the cod-liver oil has had its share in the direct benefit done to the nervous system, besides affording a protection from the irritating salt to the coats of the stomach. In summing up the good effects of the oil I find: *First*.—Absence of the digestive disorders. *Second*.—Absence of the acne eruption. *Third*.—That the anæmia, usually found in persons taking this medicine continually, is far from being marked. *Fourth*.—The body is better nourished, and appetite unimpaired. I have made trial of this treatment in other cases, with similar good results. As the articles that have appeared in your journal, in the past month, on the bromides, have made no mention of this device, I have been led to write the above.

ASPIRATION OF THE GALL-BLADDER.

Dr. P. H. Kretzschman reports a successful case in the Proceedings of the Medical Society of the County of Kings, September, 1881, of which he says:

"Five times has the gall-bladder been aspirated; thirty-four ounces and a half of bile have been removed within one month. At every operation the patient felt much relieved, and since the first withdrawal of bile the constitutional symptoms diminished in severity. At no time did the operation itself place our patient in danger, and generally speaking there was no pain attached to it."

The following generalizations he appends to his paper:

1. The operation can be performed with *safety*, without taking particular precautions in uniting the walls of the gall-bladder with those of the abdomen.

2. The operation can therefore be done as soon as the diagnosis of a dilated gall-bladder has been made, if from its size there seems to be danger of rupture, or if the patient suffers much pain. Aside from these conditions, when aspiration should be resorted to without hesitation, the question presents itself whether it would not be good practice to evacuate the contents of a distended gall-bladder under all circumstances, simply to remove the superfluous bile, which, being cut off from its natural destination, is bound to be reabsorbed by the lymphatics, carried back into the circulation and produce, to a greater or lesser degree, a condition which is generally known as "cholemia."

3. A very fine trocar, such as would be of not much value in case of simple puncture, can be employed; and by means of suction even a tenacious fluid can be removed from the gall-bladder.

4. The insertion of a small trocar or an aspirating needle is almost a painless procedure.

5. In cases of doubt as to the presence of gall-stones, a flexible probe can be passed through the canula and used as a sound.

6. Aspiration being a safe and painless operation, it can be employed for the purpose of aiding diagnosis.

The rules for performing the operation are thus formulated:

1. Aspiration should not be delayed, but resorted to as soon as the diagnosis of distended gall-bladder has been made.

2. A good-sized aspirating needle or a fine trocar should be used.

3. The instrument should be introduced into the gall-bladder at a point as high up and as near to the border of the liver as possible.

4. On withdrawing the instrument the punctured wound in the abdominal wall should at once be closed by some kind of plaster or by the introduction of a stitch.

5. The operation should be repeated as often as the gall-bladder becomes distended again.

6. The common rules of surgery as to cleanliness, etc., should be strictly adhered to.

THE TREATMENT OF THE VERTIGO OF BRIGHT'S DISEASE.

Dr. J. R. Saunby says, in the *Brit. Med. Jour.*, even where we cannot hope to effect a cure of the disease itself, it is often of the greatest moment to be able to relieve a symptom which is rendering life worthless. Vertigo is not a very common symptom in chronic Bright's disease; but, though, it does not receive much attention from text-book

writers, when it is present, it is a very serious matter to the sufferer, and often assumes a pre-eminent position in his own account of himself. After trying various remedies, I have found the greatest benefit from caffeine or theine, in doses of one, two, or three grains, in pill, three times a day. The following cases are examples: S. K., aged 69, complained of severe giddiness, but proved to be a typical case of granular kidney; after taking without benefit chloride of ammonium, iodide, and bromide of potassium, he was entirely relieved by caffeine in grain doses three times a day. J. W., aged 63, complained of giddiness, pain in the head, and loss of memory. The ophthalmoscopic signs were negative. The urine was of specific gravity 1.001: it contained a trace of albumen. She had frequent nocturnal micturition. She was ordered at first chloride of ammonium and digitalis; then theine, in doses gradually rising to three grains, three times a day, when the vertigo was completely cured. I have notes before me of two other cases equally satisfactory.

THE ABORTIVE TREATMENT OF BUBOES WITH CARBOLIC ACID.

Dr. Morse K. Taylor, U.S.A., in the April number of the *American Journal of the Medical Sciences*, reports twenty cases in which he certainly obtained remarkably successful results, and he states that within the last seven years he has treated nearly one hundred and fifty cases of various forms of lymphadenitis, arising from specific and non-specific causes; and, where he saw the cases before the formation of pus was well established, he had not failed to arrest the process immediately, and allay the pain in a few minutes. His method is to inject from ten to forty minims of a solution, containing eight or ten grains of carbolic acid to the ounce of water, directly into the interior of the inflamed gland.

THE PROPER METHOD OF ADMINISTERING THE BICHLORIDE OF MERCURY IN SYPHILIS.

By C. A. BRYCE, M.D.

Richmond, Va., President Old Dominion Medical Association, Editor Southern Clinic, &c.

I almost invariably use the bichloride in treating syphilis, and my dose ranges from the twentieth to the sixtieth of a grain. I usually prescribe it in twenty-fourth grain doses; I always give it in an *alcoholic* solution and uncombined with any other drug. I believe this is a most important matter.

For years I have, in the treatment of a very large class of syphilitic diseases, never given any other form of mercury but the *bichloride*; never combined with potass. iod., nor any of the alteratives. My prescription for adults is generally about as follows:

℞. Hyd. chlo. corrosiv..... gr. ii.
Spts. vini gallic..... ʒ ii.
Aq. distil ʒ iv.
M. S.—Teaspoonful before each meal.

At one time or another I may have recourse to other alteratives, tonics, &c., but generally I find this ℞ sufficient to prevent constitutional disturbances, if I see the patient early, and quite sufficient to cure constitutional syphilis when not of long standing, and beneficial in all stages of the disease.—*Mississippi Valley Medical Monthly*.

SOME POINTS IN THE TREATMENT OF FRACTURES.

By OSCAR J. COSKERY, M.D.

Professor of Surgery, College of Physicians and Surgeons.

1. Set at once.
2. Never use chloroform if it can be avoided.
3. All that are required in setting a limb are delicate manipulation, well-padded pieces of stiff material and a roller.
4. Absence of pain, of deformity, and of hemorrhage in compound fractures are signs of successful adjustment.
5. The movable-immovable apparatus, as exemplified in the plaster of Paris *splints*, is, perhaps, the best form of apparatus for the great majority of fractures.
6. Confinement to bed over twenty-four or forty-eight hours (except for the thigh) is rarely, if ever, necessary in uncomplicated fracture.
7. Passive motion is apt to do more harm than good.
8. It is better to keep the mechanical appliances, the splints, on too long than for too short a time.—*Maryland Medical Journal*.

ACUTE CYSTITIS TREATED WITH ERGOT.

Some time ago I was called to see Mr. B., aged twenty-seven years, and found him suffering with a well-marked cystitis. After trying several commonly-used remedies without success, I resorted to fluid extract of ergot, in dram doses three times daily, which made a rapid and complete cure. Since this time I have treated at least a dozen cases with this remedy, and it has in no instance failed to give a happy result.

I would be glad if other physicians would report their experience with the drug in the treatment of this troublesome disease.

W. C. L., M.D.

[Dr. Bumstead recommends ergot in acute cystitis. His favorite prescription is—

℞ Vini ergotæ..... ʒ iiij.
Tinct. ferri chloridi..... ʒ j.
M. Dose, a teaspoonful every six hours.]

—*Louisville Medical News*.

THE CANADA MEDICAL RECORD,

Monthly Journal of Medicine and Pharmacy.

EDITORS :

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., LOND.

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MONTREAL, JULY, 1882.

GUITEAU.

At last the solemn farce is over ; the assassin of President Garfield has paid the penalty of his crime on the scaffold. The exalted position and noble character of the victim and the peculiarly distressing circumstances of the murder have combined to excite the interest and call forth the sympathies of the civilized world ; while the popular craving for the sensational, and the readiness of the daily press to pander to this depraved taste, have enabled Guiteau to absorb a far larger share of public attention than he really deserved. From a medical point of view the case presents many features of interest ; but some time must elapse before the numerous conflicting theories of to-day are harmonized, and the points at issue definitely settled. Meanwhile, it is to be feared that the general reputation of the medical profession has not been improved by the conduct of some of its members who figured prominently in the case. The unfortunate conflicts of opinion and unseemly squabbles between medical men during the illness of the President and the trial of his assassin, have not only tended to demonstrate to the general public how widely different are the views of representative men upon the most important questions, but have also laid bare an amount of discourtesy petty jealousy and professional rivalry which is highly discreditable to our profession. While the President lingered through those memorable twelve weeks of suffering, the profession was scandalized by the ignorance and assumption of such men as Dr. Bliss ; the conduct of the medical attendants was weak and vacillating ; their official bulletins were meagre and misleading ; their sayings and doings were daily criticised in the public prints by scores of *would-be* atten-

dants, till at length public confidence was shaken, and general dissatisfaction expressed with the medical management of the case. After the President's death, even the autopsy was sadly bungled and the profession again publicly disgraced. Then came the memorable trial at Washington ; Guiteau was arraigned, and the plea of insanity put forward in his defence. Forthwith crowds of experts flocked to Washington, and aired their respective hobbies, while the assassin was permitted to insult daily the judge, lawyers and witnesses, and amuse densely-packed audiences with his impudence and buffoonery. As an exhibition of forensic knowledge and ability, the trial was equally discreditable to the professions of law and medicine ; it took them eight months to decide that Guiteau knew what he was doing when he shot the President, that he knew his act to be wrong because contrary to the law of the land, and that, consequently, he was sane and responsible when he committed the murder. The usual appeals and petitions having failed to secure a reprieve, the death sentence was carried out on 30th June, almost a year after the perpetration of the crime. And now we are called upon to witness a disgraceful squabble among the medical men who were entrusted with the post-mortem examination of the assassin. Charges and countercharges, threats and recriminations, published in the columns of the daily press, make a discreditable ending to a most discreditable case.

Medical men in general, and psychologists in particular, are usually loud in their denunciations of the legal test of responsibility which at present obtains. They are tolerably unanimous in styling the "*right and wrong* test," as "*a legal myth*," a "*relic of barbarism*," etc. ; but when called upon to suggest a better one, their unanimity ceases, and their theories and views are found to be as dissimilar as they are unpractical. The present case has not helped matters, each psychologist has arrived at a different diagnosis, and each appeals confidently to posterity to establish the correctness of his own particular theory. Law has not learned much from medicine during the progress of this trial ; and, unfortunately, the public have been left with the impression that any rogue possessed of sufficient cunning and determination could, with little difficulty, convince some willing insanity experts of his mental unsoundness and irresponsibility. "*Quod volumus jubemus*," seems to be the motto of many of these

psychological gentlemen. The New York *Medical Record* in commenting upon Guiteau makes the following very sensible remarks :—

"Guiteau, and all Guiteaus, should, in the present stage of society, be considered responsible, and should be punished. The protection of society and the demands of justice alike call for it.

There has been much said of late about 'the best leading experts,' and how sure they are that Guiteau is insane. These experts are quite entitled to their opinion, but it is a mistake to suppose that they represent all the best and widest experience in psychiatry. That in the future Guiteau will be considered insane and irresponsible we cannot believe, assuming that futurity will interest itself in the assassin at all.

Guiteau was the victim of a peculiar psychosis. He was not sane, but we hold that future jurists and experts will find themselves in trouble if they class this psychosis strictly among the insanities. The difficulty that will arise has already shown itself. The insane man cannot do a criminal action; he is not, and cannot be, criminally responsible. This truth has rarely been questioned. Yet society cannot and will not tolerate the idea that so-called 'reasoning maniacs,' of the Guiteau type, are irresponsible and require no punishment. Difficulties, disputes, injustice, even social danger, will arise if an original moral perverseness, developed by self-indulgence, makes a man a lunatic, incapable of crime.

Moral insanity has been the bane of the code, and it will continue to be as long as experts insist that Guiteaus are irresponsible. There is such a thing as ultra-expertness, as too much specialism. It sees an uncanny light in every eye. Its psychology deserves to be written."

CONSULTATIONS WITH HOMŒOPATHS.

Unusual interest has been manifested in the proceedings of the American Medical Association, which met recently at St. Paul, Minn. Some months ago the Medical Society of the State of New York, chafing under the restraints of the American Code of Ethics, framed and adopted a new code, permitting free consultations with competent practitioners of any school. It was claimed that thereby all semblance of prejudice and bigotry would be removed, and the tone of the whole profession elevated. In the millennial days

which would then assuredly come, medical men of all descriptions would lay aside their own particular creeds, dogmas or pathies, and meet together amicably as "true and honest practitioners." This revolutionary action of the New York Medical Society aroused a perfect storm of opposition throughout the length and breadth of the land, and the journalistic war became fierce and bitter. The Medical Societies of other States hastened to condemn the New York Code, and instructed their delegates to the American Association to oppose any change in the American Code. It soon became evident that professional opinion throughout the United States was almost unanimously against the innovation, and that the New York State Society stood alone, championed only by its faithful ally, the New York *Medical Record*. At St. Paul, the American Medical Association refused admission to the New York delegates, and pronounced emphatically against any relaxation of existing rules. It also repudiated the name "*Allopath*" as applied to members of the regular profession, and defined the position of medical men under the code by the following resolution :—

"In order to correct a misconception which largely prevails in the public mind, and to some extent prevails among members of the medical profession, as to the liberty of action authorized by this Association in the treatment of disease, we deem it proper to make a declaration of principles broadly applicable to the healing art, as sanctioned and practised under our code, to wit: Rational medicine, being based upon experience and pathological research, demands absolute freedom in the selection and administration of *materia medica*; and there is nothing in the code of ethics of the American Medical Association prohibiting the use by its members of any known and honorable means of combating disease. Furthermore, as contributing to the alleviation of human suffering, we hail with pleasure and gratitude every discovery in etiological and therapeutical science by whomsoever made.

We therefore reject as untrue and obnoxious the term "*Allopathists*" as applied to the members of this Association by dogmatists and extremists without its fold.

First.—Because it tends to convey the erroneous impression that we are restricted to the choice of remedies and the method of using them by other than the limits of rational science.

Second.—Because for any association of men claiming to practise the profession of medicine to adopt a name based upon limited and conjectured theories of therapeutics for the purpose of designating a particular school of medicine, we have always held, and still regard, as unscientific in principle and dangerous in practice."

COLLEGE OF PHYSICIANS AND SURGEONS.

PROVINCE OF QUEBEC.

The following is a statement showing the number of judgments rendered against charlatans and unlicensed practitioners and midwives, from the 1st May, 1881, to the 1st July, 1882.

John Rosco, Montreal, judgment rendered in November, 1881. Fine \$25 and cost, or thirty days in common gaol.

Richard Birch, East Templeton, Ottawa Co., judgment rendered in November, 1881. Fine \$25 and cost, or 30 days in common gaol.

Denis Dragon, Montreal, judgment rendered in June, 1881. Fine \$25 and cost, or 30 days in common gaol.

Joseph Quintal, Longueuil, judgment rendered on the 31st October, 1881. Fine \$25 and cost, or 30 days in common gaol.

Joseph Rondpré, Ste. Anne de la Pêrade, confessed judgment on the 11th June, 1881, and paid \$25 and cost.

Gabriel Courchêne, La Baie, Yamaska Co., confessed judgment on the 25th October, 1881, and paid \$25 and cost.

Dame Emelie Lebrun, St. Benoit, unlicensed midwife, confessed judgment on 8th October, 1881, and paid \$15 and costs.

Mathieu Souvielle, Montreal, confessed judgment and paid \$25 and cost, 25th October, 1881.

Dame Jean Rousselle, alias Le Petit, Quebec, judgment rendered on the 14th February, 1882. Fine \$25 and cost, or 30 days imprisonment.

Jérôme Fiset, Quebec, judgment rendered in April, 1882. Fine \$25 and cost, or 30 days imprisonment.

Michel Garon, Montreal, judgment rendered in November, 1881. Fine \$25 and cost, or 30 days imprisonment.

John Flint Gore, unlicensed practitioner, Stanstead, confessed judgment 2nd March, 1882, and paid \$25 and cost.

Dame Margaret McIntosh, Montreal, unlicensed midwife, confessed judgment, October 1881, and paid \$20.

Dame Antoine Guertin, Montreal, unlicensed midwife, confessed judgment and paid \$10.

Theodore Davis Whitcher, Beebe Plain, judgment rendered on the 30th June, 1882. Fine \$100 and cost, or 30 days imprisonment.

Jean Jacques, alias Leblond, St. Pierre les Becquets, judgment rendered 30th June, 1882. Fine \$25 and cost, or 8 days imprisonment.

Theodore Davis Whitcher, Beebe Plain, Stanstead County, judgment rendered, second case, on 30th June, 1882. Fine \$100 and cost, or 30 days imprisonment.

A VERY JUVENILE MURDERER.

Probably the youngest example of the genus murderer is Master Alfred Burdett, æt. 33 months, a native of Leicester, who was last week declared to have, in all probability, caused the death of another infant twenty-two months old. The victim of this homicidal child had been playing apparently with his murderer, who, at any rate, was discovered walking away with blood-stained pinafore from the unconscious body of the deceased; and at the same time the former held in his hand a piece of tin with which he had presumably fractured the latter's skull. The tender years of this promising candidate for distinction in the criminal ranks of the future serve to remove him from criminally-responsible breakers of the law; but it is with small surprise that we hear of frequent complaints of his ill-using children having been made. This instance of precocious depravity is perhaps an unusual one, but it possesses an interest of its own as showing the possibility of the worst passions being developed in children of even such immature years. As a psychological study the case possesses an unusual interest, and is worthy of very careful consideration on its bearing on the development of the human mind.—*Med. Press and Circular.*

PAPOMA.

There has lately been introduced to the notice of the profession in Canada, by J. Wyeth & Bro., of Philadelphia, through their agents in Montreal, Perry, Son & Lawrence, a farinaceous food for infants and children which deserves more than a passing notice. It has been advertised in the RECORD some time, but we desired to practically

test its usefulness upon a large scale before pronouncing an opinion. This we have done for the past four months, during which time Papoma was the almost exclusive diet for artificially fed children under our charge. The results have been satisfactory in a high degree. The food was in every instance readily taken, digestion seemed to be carried on perfectly, and the bowels acted with marked regularity. Its nutritive power is great, for growth was steady. In several instances where development was apparently at a standstill the change of food to Papoma was followed in a few days by decided improvement. We have, therefore, no hesitation in recommending Papoma to our readers as a very valuable addition to the list of infantile foods.

AN IMPORTANT AND SEASONABLE REMEDIAL AGENT.

The value of Lactopeptine in many forms of indigestion and malnutrition is already fully recognized by our readers. We desire, however, to direct attention to its especial indication in the complaint particularly attaching to present season, viz. : malnutrition and cholera infantum, whether arising from teething or other causes. We have before us a large number of commendatory letters from physicians in this country, Great Britain and the United States, enumerating cases which have been successfully treated with Lactopeptine, and in most of which Pepsin had failed to benefit. With a great many, the above preparation has entirely superseded the use of Pepsin, and we consider that such preference is fully justified.

AMERICAN DELEGATES TO THE BRITISH MEDICAL ASSOCIATION.

At the recent session of the American Medical Association the following gentlemen were selected as delegates to the British Medical Association :— Drs. T. A. Emmet, D. Lewis, E. H. Brush and W. M. Carpenter of New York, and Dr. J. M. Da Costa of Pennsylvania. The Association meets this year at Worcester on August 8th, 9th, 10th and 11th. The proceedings will be of unusual interest as the Association celebrates its fiftieth anniversary.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

In view of the remarkable success of the *British Medical Journal*, the official organ of the British

Medical Association, the American Association is taking steps to issue on a similar plan a weekly journal as its official organ, instead of publishing, as heretofore, a bulky annual volume of transactions. A board of trustees has been appointed to arrange plans and details.

A TEN-OUNCE BABY.

The *Medical Record* reports the case of a New York woman who gave birth recently to a living son weighing ten ounces. Two years previously she bore a son weighing eleven ounces, who thrived and grew till he is now nearly as large as an average child of the same age. The woman and her husband are of natural size.

WHAT LUNATICS THINK CONCERNING THE RESPONSIBILITY OF THE INSANE.

At the debating society organized by the patients in the Lunatic Asylum at Hanwell, England, the question of the responsibility of the insane was recently discussed. The conclusion was reached that the insane ought to be considered responsible. One of the patients, who shot at the Queen of England, confessed that he never would have done it if his predecessor in the same crime had been executed.—*Med. Record*.

MORTALITY OF MONTREAL FOR THE MONTH OF JUNE, 1882.

Males	190
Females.....	182

Total 372

Still births..... 21

Mortality under 5 years of age..... 207

Deaths from zymotic diseases were as follows :—

Small-pox	0
Measles	7
Scarlatina	5
Diphtheria	20
Croup.....	4
Pertussis.....	2
Typhoid Fever.....	12
Other Fevers	12
Dysentery.....	1
Diarrhoea.....	16
Cholera Infantum..	14
Other zymotic diseases....	2

Total 95

There has been a marked increase in the mortality from measles, scarlet fever, typhoid fever and the diarrhoeal group.

THE CANADA MEDICAL RECORD.

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SANTA BARBARA, CALIFORNIA, AS A HEALTH RESORT.

BY WOLFRED NELSON, C.M., M.D.

For all seeking a dry, pleasant winter climate, either for health or pleasure, Santa Barbara, California, can be warmly and confidently recommended. Public attention has been particularly drawn towards this sanitarium for several years past, both for health, pleasure and residence.

Santa Barbara lies two hundred and eighty miles southeast of San Francisco, and can be reached in thirty-six hours by steamer, sailing from the latter city every three days, or by the Southern Pacific Railroad daily to Newhall, and thence by stage to Santa Barbara, occupying some fifty-two hours. Very soon Santa Barbara will have an all-rail route of its own direct to San Francisco, greatly economizing expense and time.

Its situation on the coast makes it the best known of all the California seaside resorts. The city is laid out on a slope, extending back from its magnificent beach, the finest in all California, to the coast range of mountains—the latter gracefully surround this subtropical sanitarium, and exercise their kindly offices in depriving the chilling winds of the desert of their moisture so prejudicial to many people, and reach the city in dry gentle

currents. One may safely say that two-thirds of the city is surrounded by mountain, hill and dale—and within this natural amphitheatre nestles this charming resort. The grand old Pacific completes its surroundings. Such is the *locale* of the city, where one can enjoy the advantages of city life and the healthier pleasures of the country.

Nor is Santa Barbara void of a spice of the historic and ancient. The traveller familiar with Moorish architecture, at once notes the old Mission Church, of a purely Spanish style of architecture, now dating back nearly a century—telling its own tale of Mexican descent. The city itself may be said to be “ancient and modern,” not particularly of the High Church stripe, but a happy medium of both, taken in either sense. The city is noted for its pleasant and highly intellectual society. It being the home of families from Europe, the United States, Canada, etc.—people of easy means who have selected it for its natural beauties and healthful atmosphere. Santa Barbara is rich in natural charms, the beauty of its scenery being varied by mountain, ocean, hill and dale.

The beach of Santa Barbara is easily reached in a few minutes from the hotel by car. It deserves special mention; along it one can walk or drive for miles or sit lost in “sweet meditation” or watch the never-ceasing waves of the broad Pacific as they roll in, often freighted with beautiful shells and the most delicate of marine mosses, all the while inspiring the health-giving air. Others of a

more matter-of-fact turn of mind can drive, fish, etc., shoot or botanize to their hearts' content. If their souls be utterly dead to all this good cheer, they can stay at the Hotel, read, eat, grumble, and make themselves as disagreeable as they please. This always being the peculiar province and privilege of the traveller.

Santa Barbara has done wonders for legions of people suffering from the curse of our modern civilization—lung affections. Thousands are living to-day in California and elsewhere, who owe their extended lives solely to its climate. Many, alas, wait *too long* ere starting for California. *Such should stay at home.* Its soft balmy atmosphere, and agreeable temperature, is a curative agent in itself.

Those seeking relief from, and with a hereditary tendency to, lung troubles, after consulting their physicians should visit it early, when all will conspire to benefit them—change of scene, new faces, new thoughts, all divert the sick and tired, and furnish that best of hygienic medicines, *distraction*. Gently, and almost imperceptibly, many such are soon brought back to health. The appetite improves, a little color is seen in the once pallid cheek. A new vigor is infused into the body, making it susceptible of greater exertion, hence refreshing slumber, with the better appetite and the constantly increasing strength; finally comes the gain in flesh—and presto, they “throw physic to the dogs” (why this is done the writer cannot say, as in an extensive practice he has yet to learn that the latter take it, they considering it a gratuitous charity and impertinence)—and rightly give the credit to the climate.

No one climate is suitable for all classes of cases—a few weeks' residence will enable the visitor to judge of the climate, and its suitability to his or her case. If not agreeable and a drier climate is necessary, they can drive to the healthful valley of the Ojai near Santa Barbara, where they can live, eat and sleep out of doors, without any cover over them, but the canopy of the heavens, with safety and benefit. A friend of the writer's, in speaking of the benefit that he had received from the mountain air, for lung trouble, fittingly described it by saying, “it actually tasted good.” Quite a number from the Isthmus have already, under my advice, visited Santa Barbara. The sick and delicate to gain health and strength, the weak and debilitated by long residence in the hot and humid Tropics, to reinvigorate their worn and relaxed

bodies. Of these, one and all write back warmly—nay, some affectionately, of what the climate of California has done for them. Several families sent there for health have decided to settle. Their actions speaking louder than their words.

The visitor to Santa Barbara will find excellent hotels and boarding houses. The leading hotel, and that best situated for those seeking health or pleasure, is the Arlington, one of the largest and best-managed Hotels in Southern California.

PANAMA, July 27th, 1882.

Correspondence.

To the Editors of THE CANADA MEDICAL RECORD.

In your last July issue, page 238, you provide your readers with some remarks and quotations regarding the everlasting *bugbear* of “consultations with Homœopaths.”

You mention the fact of the Medical Society of the State of New York having framed and adopted a new code of ethics, “*permitting free consultations with competent practitioners of any school.*”

You say that this action met with the almost unanimous opposition and repudiation of the Medical Societies of other States of the Union. This likewise extended to the name of *Allopath*, because it was *untrue* and obnoxious, etc.

The Medical Societies of the other States made a declaration of principles, too, beginning with; “Rational medicine, being based upon experience and pathological research, demands absolute freedom in the selection and administration of *materia medica*, and that there is nothing in its code of ethics prohibiting the use by its members of any known and *honorable* means of combating disease and as a means of alleviating human suffering, and we hail with pleasure and gratitude every discovery in etiological and therapeutical science, by whomsoever made.”

One would think that such a declaration would permit of unlimited consultations and intercourse “with competent practitioners of any school,” just as the Medical Society of the State of New York desired. Why, then, do the Medical Societies of other States condemn the New York code—I would like to know? Let us see what more they say.

The American Medical Association say:—“We

therefore reject as untrue and obnoxious the term "*Allopathists*," as applied to the members of this association by *dogmatists* and *extremists* without its fold."

First reason—"Because it tends to convey the erroneous impression that we are restricted to the choice of remedies and the method of using them by other than the limits of *rational* science."

Second reason—"Because for any association of men, claiming to practice the profession of medicine, to adopt a name based upon *limited* and *conjectured* theories of therapeutics, for the purpose of designating a particular school of medicine, we have always held, and still regard, as unscientific in principle and dangerous in practice."

Now, gentlemen, does not the animus thus lurking under the *first* and *second* because, explain in some measure the condemnation of the New York code? "The hailing with gratitude every discovery in therapeutical science, by whomsoever made," surely could not induce the condemnation of the New York code.

"Rational medicine, based upon experience and pathological research" surely could not do it, then what evidence have we as a reason for the condemnation? Answer.—Because some "*dogmatists* and *extremists*, and associations of men, practice medicine based upon conjectured theories of therapeutics, have called them "*Allopaths*" !!! Big *reason* certainly. The term *Allopath* must partake of the power of dynamite; what is its meaning? "A mode of medical practice which cures diseases by producing a condition of the system opposite to that essential to the disease." Does the American Medical Association not act on this mode of practice. If it does, why get vexed; why is the term *untrue* and *obnoxious*? If it does not, then what is the "*rational medicine*" which it esteems. Let the American Medical Association, or any other, give cases to show what "*rational*" medicine consists of. Give us the therapeutic treatment of bronchitis, pneumonia, diarrhœa, dysentery, cystitis, peritonitis, etc., etc. According to their *rational method* let us have these clearly given, and we shall know, independently of codes of ethics, whether the term *Allopath* or *Homœopath* is a correct designation for this mode of treatment. People when they are sick in these days require to know, whether they are to be treated the one way or the other, because if the American Association hold Homœopathy to be "*conjectured theories of therapeutics*, alike *unscientific* and *dangerous*," they can-

not hail it with pleasure, as others do. No, it would be more consistent in them to repudiate that therapeutic science and give to it dishonorable epithets. Although they declare that they would "not prohibit their members from using any known and honorable means of combating disease," *similia similibus curentur* would never be that honorable means,' seemingly. The way in my opinion to bring about a *rational* mode of consultation, other than for diagnosis and assistance in actual surgical operations, would be that the "*regular*" profession should study and test clinical Homœopathic therapeutics, "*based upon experience and pathological research*," thereby finding out the *modus operandi* of *specifics*. This should first be done by those who assume the cognomen of *regulars*; and in the meantime, while doing that, calm discussions should be permitted in your journals for the sole object of arriving at the truth, for its own sake, and not for individual and collective interest. Doubtless good would come of this.

Yours truly,

JOHN WANLESS, M.D.

Progress of Medical Science.

THE ANALYTICAL STUDY OF AUSCULTATION AND PERCUSSION.

By AUSTIN FLINT, M.D., N.Y.

[Though this paper was read in August last, before the International Medical Congress, and will yet appear in its Transactions, still, as few will see that volume, and few have carefully studied the interesting subject herein analyzed, the paper is presented, with great pleasure, to the readers of this Journal.—E. S. G.)

An offering of homage to the memory of Laennec is a fitting introduction to a paper having for its aim promotion of our knowledge of physical diagnosis.

Laennec was not the first to listen for intrathoracic sounds. Mention is made in the writings of Hippocrates of at least one auscultatory physical sign; and the prophetic intimation of Robert Hook, in 1705, has been often quoted.* Doubtless hundreds, before the time of Laennec, had applied the ear to the thorax, and heard pulmonary as well as cardiac sounds. But it was reserved for Laennec to study these sounds in order to discover the physical signs of different diseases, and

* "Who knows but that one may discover the works performed in the several offices and shops of a man's body by the sound they make, and thereby discover what instrument or engine is out of order."

by prosecuting his study to create an important epoch in the history of medicine.

Homage is also due to the author of the work entitled, "A new Method for the Recognition of Internal Diseases of the Chest by the Percussion of this Cavity," which appeared more than half a century before the publication of Laennec's treatise on auscultation. It does not detract from the honor which belongs to Avenbrugger, that an adequate recognition of the value of the method of examination which he originated, followed, and was in a great measure attributable to, the labors of Laennec in behalf of auscultation.

The zeal and the industry as well as the genius of Laennec are evidenced by the accuracy of his descriptions of auscultatory phenomena, and by the fact that the verity of the physical signs which he discovered has, in the main, been confirmed by subsequent observers in all countries. That he should have cultivated this field of study so thoroughly as to gather all the products which it is capable of producing, was not to have been expected. The marvel is that he was able to render it so productive by his own labours during his short life. It is no disparagement to say that he was led into some errors, that this mode of study was in certain respects defective, and that parts of the field were left uncultivated.

Since the time of Laennec much has been added to our knowledge of auscultation and percussion. It must be said, however, that the enlargement of the scope and the increase in the precision of their application to diagnosis, have not been commensurate with the study given to them, and with the space which they have filled in medical literature. A considerable share of the attention which they have received has been directed to the mechanism of physical signs—a highly interesting branch of inquiry, but not essential to the practical utility, and involving much liability to error. The number of signs has by some writers been needlessly increased. There have been over-refinements of description and of interpretation. The nomenclature has been open to criticism. Names have not been used by different writers with uniformity as regards signification. The names applied to some signs have conveyed not merely imperfect but erroneous ideas. Some writers have even designated signs by the names of authors who have described them. Hence it is that the study of auscultation and percussion, and their practical employment in diagnosis, have seemed to involve peculiar difficulties, and to be necessarily restricted to a few practitioners. It is common enough for physicians to say, without any sense of self-reproach, that they do not profess to be adepts in physical diagnosis, and to consider with complacency that it properly belongs to a specialty. As opposed to this view, I claim that by a simple method of study, which, for the sake of distinction, I have called analytical, the characters distinctive of physical signs are rendered clear, precise, and readily appreciable, so that the practical advantages of auscultation and

percussion may be made available in diagnosis with a moderate amount of time and attention on the part of the student and the practitioner.

By the analytical method of study, I mean the analysis and comparison of physical signs in respect of the few obvious points of difference by which, practically, musical and other sounds are commonly discriminated. The most important of these points of difference relate to the intensity, the pitch, and the quality of sounds. It is unnecessary to define these terms, except to say that under the name quality I include all the differences in character which are exclusive of pitch and intensity. The innumerable variations embraced under the name quality, as thus defined, may be illustrated by the diversities of the human voice. Of many thousand persons, few, if any, are to be found with voices so alike as not to be distinguishable from each other, aside from differences relating to pitch and intensity. In the study of the signs furnished by auscultation and percussion, the differential points, in addition to those pertaining to intensity, pitch, and quality, are few and easily appreciated. They relate to apparent distance from, or nearness to, the ear, moisture or dryness, the rhythmical succession and the interruption of the continuity of sounds.

It is to be assumed that morbid physical signs represent morbid physical conditions, and not diseases—that is, they are diagnostic of the latter only in so far as the physical conditions which they represent are characteristic of particular diseases. It is also to be assumed that the sole reliable basis of our knowledge of the significance of the signs is experience. Certain morbid signs denote particular abnormal morbid conditions, because the former are found to be constantly associated with the latter. The only solid foundation of the knowledge which underlies the practical application to diagnosis of auscultation and percussion, therefore, is in clinical and autopsical observations. It is, of course, desirable to ascertain the mechanism of the signs, but it is by no means a *sine qua non* in order to establish their validity. For example, is the so-called bronchial respiration due to consonance, according to the theory of Skoda; or is it produced by the current of air within the bronchial tubes, as held by Laennec; or is it the laryngo-tracheal respiration conducted by solidified lung? These questions need not be answered in order to appreciate the significance of the sign, or to recognize it by means of its distinctive characters. To infer from the acoustic characters of signs that, according to the laws of physics, certain morbid conditions must exist, or, on the other hand, to determine *a priori* the signs which should be represented by certain conditions, has proved, and will continue to prove, a source of fallacies. The endeavor to make the laws of acoustics the basis of the clinical significance of physical signs, has tended, as it seems to me, to retard not a little the advancement and diffusion of the practical knowledge of auscultation and percussion. Basing

the significance of signs on experience, the analytical method of study protects against fallacies which must occur if it be assumed that the abnormal sounds contain intrinsic evidence of the nature of the physical conditions which they represent, or if it be considered indispensable to ascertain fully the mechanism of signs. By attempting to deduce the significance of sounds from their acoustic characters, the play of the imagination and the bias of preconceived notions cannot fail to lead to error.

It is a trite statement that the point of departure for the study of morbid physical signs is the study of healthy signs, inasmuch as the former are either deviations from, or additions to, the latter. But it may not be amiss to state, as a conclusion resulting from an experience of more than a quarter of a century in practical teaching, that neglect of a proper study of healthy signs is the secret of the failure of many who undertake to master auscultation and percussion. Moreover, knowledge of the characters of the more important, and the most difficult to master, of the morbid respiratory and vocal signs, is already obtained when a thorough study has been made of the sounds produced by respiration and the voice over the larynx and trachea, over an area on the chest corresponding to the primary and secondary bronchi, and over the remainder of the thorax.

Proceeding, after these preliminary remarks, to consider the physical signs furnished by auscultation and percussion as determined and differentiated by analytical study, a natural division of the auscultatory signs is referable to: 1st, respiration; 2nd, the loud voice and speech; and 3rd, the whispered voice and speech. Having considered the signs belonging to these divisions, it will remain to consider the signs produced by percussion.

SIGNS REFERABLE TO RESPIRATION.

The number of morbid respiratory signs which require nicety of discrimination is not large. They are among the signs grouped as abnormal modifications of the normal sounds. The adventitious sounds or rales are readily discriminated. The chief cause of confusion and difficulty, as regards the latter signs, has been a needless redundancy of them. The list need not extend beyond the crepitant and the sub-crepitant râle, the coarse and fine moist bronchial or bubbling râles, the sibilant and the sonorous dry bronchial râles, pleural friction sounds, gurgling and splashing sounds, amphoric respiration, and metallic tinkling. These signs are readily recognized and differentiated; there is no fault to be found with the names, and the significance of each has been sufficiently established. Of the signs belonging to the group of the abnormal modifications of the normal sounds, suppressed, simply weakened, and interrupted respiratory murmur require no analysis. The remainder of the signs in this group claim analytical study. The latter signs are as follows: 1.

Bronchial respiration; 2. Gradatory combinations of the bronchial respiration and the normal respiratory or vesicular murmur, which I include under the name broncho-vesicular respiration; 3. Cavernous, broncho-cavernous, and caverno-vesicular respiration; and 4. Prolonged expiration.

Under the name bronchial respiration, Laennec embraced the normal laryngeal and tracheal respiration, together with the morbid respiratory sign representing solidified lung. He considered them all as essentially identical: and that they are so is easily demonstrated by analysis and comparison. He distinguished the morbid sign from the normal respiratory murmur by the absence of what he called the slight crepitation, which is characteristic of the inspiratory sound in the normal respiratory murmur—the absence, in other words, of its vesicular quality—by dryness, and by a sensory impression as if the air passed into a large empty space. Laennec did not compare auscultatory sounds in respect of pitch. Skoda, Walshe, Barth, and Roger, in the early editions of their works, made mention of pitch in comparing bronchial respiration with the normal respiratory murmur, without apparently attaching to it much importance. With these exceptions, comparisons in respect of pitch had not, so far as I know, entered into the descriptions of respiratory signs by writers in different countries, prior to thirty years ago, when I was led to the analytical study of these signs with special reference to variations in this respect. The results were published in the "Transactions of the American Medical Association" in 1852.* I hope not to incur the charge of having exceeded the bounds of modesty in claiming, by my studies at that time and subsequently, to have established, on the basis of variations in pitch, characters by which these and other respiratory signs may be positively and easily differentiated.

The normal respiratory murmur and the bronchial respiration may be considered as extremes between which are abnormal modifications other than those pertaining to the latter morbid sign. The differential characters of intermediate signs are to be determined by analytical study and comparison with those of the normal respiratory murmur, on the one hand, and, on the other hand, with those of bronchial respiration. As a preliminary step, the normal respiratory murmur and bronchial respiration are to be contrasted in respect of the characters of each as ascertained by analysis.

The inspiratory sound in the normal respiratory murmur is of variable intensity in different persons. Intensity, therefore, does not enter into its characteristics. Its pitch is low, and its quality, for lack of a better term, may be called vesicular. The vesicular quality is *sui generis*. It cannot be

* Prize Essay on Variations of Pitch in Percussion and Respiratory Sounds, and their application to Physical Diagnosis.

described by words, and a distinct apprehension of it cannot be given by any analogy. The expiratory sound is continuous with the inspiratory, in natural breathing; it is still lower in pitch, much shorter, and the quality is neither vesicular nor tubular. Its quality may be expressed by calling it a simple blowing sound.

In contrast to these characters of the normal respiratory murmur, the inspiratory sound in bronchial respiration is high in pitch and tubular in quality, its intensity, like that of the inspiratory sound in the normal respiratory murmur, being variable, and therefore not entering into the distinctive characters of the signs. The expiratory sound, separated from the inspiratory sound by a brief interval, is higher in pitch than the inspiratory sound, tubular in quality, usually more intense, and its duration is equal to or longer than that of the inspiratory sound.

Bronchial respiration is the respiratory sign of complete or considerable solidification of lung. Now, between a degree of solidification sufficient to give rise to bronchial respiration and the normal condition of lung, gradations in solidification are involved in different diseases, and in different stages of the progress of certain diseases. Pneumonia and phthisis are familiar examples of diseases involving these gradations. As regards the abnormal modifications of respiration caused by a slight or a moderate degree of solidification, there is not a little vagueness and confusion; the respiratory sounds have been called rude, rough, harsh, sharp and dry. These terms convey not only indefinite but erroneous ideas. As an illustration of incongruity, a cardiac bellows murmur is distinguished as soft, whereas a similar sound produced by respiration would be called rude. Supplementary or puerile respiration is harsher in quality than the sound which represents moderate solidification of lung. A late German author of a work on diagnosis, which has been translated into the English and the French languages, includes, under the name hyper-vesicular, the sign called by others rude, rough, harsh, etc., whereas a distinctive feature of this sign is diminution of the vesicular quality of the inspiratory sound.* The lack of a clear apprehension of the characters distinctive of the sign is implied in the term indeterminate (*unbestimmt*) applied to it by Skoda, and still used by German writers.† I have proposed, as already stated, for the sounds

representing gradations of solidification of lung, falling short of the degree represented by bronchial respiration, the name broncho-vesicular respiration. This term expresses what analysis teaches—namely, a combination of the characters of bronchial respiration with those of the normal respiratory murmur. In broncho-vesicular respiration the inspiratory sound is both vesicular and tubular. The vesicular quality, always less than in healthy, is more or less diminished, and the tubular quality is more or less marked in proportion to the degree of solidification. The pitch is, raised in proportion as the tubular quality predominates over the vesicular. The intensity is not important. The pitch, tubular quality, and length of the expiratory sound are in correspondence with the characters of the inspiratory sound. If in the inspiratory sound the vesicular quality predominate over the tubular, the expiratory sound is but little prolonged, its tubularity is not marked, and the pitch is but moderately raised; on the other hand, if in the inspiratory sound the tubular quality predominate over the vesicular the expiratory sound is more prolonged, its tubularity is more marked, and the pitch is higher. According to this description, a broncho-vesicular respiration may approximate closely to the bronchial, the chief distinction consisting in an appreciable vesicular quality in the inspiration; or, it may approximate to the normal respiratory murmur, the distinction consisting in the presence of an appreciable tubular quality. There are gradatory combinations between these extremes as regards the relative proportions of the bronchial and the vesicular characters. As regards the significance of the sign, the solidification is greater in proportion as the characters of the sign approximate to those of bronchial respiration, and the amount of solidification is small in proportion as the characters approximate to those of the normal respiratory murmur. The intermediate gradatory combinations are exemplified during the stage of resolution in acute lobar pneumonia. The practical value of the sign in that connection is obvious. The sign is still more valuable in cases of phthisis and other pulmonary affections which involve slight or moderate degrees of solidification, either diffused or circumscribed. This sign enables the auscultator, not only to recognise the existence and the limits of solidification when not sufficient to give rise to bronchial respiration, but to ascertain whether the solidification be moderate or slight.

The distinctive characters of the broncho-vesicular respiration may be studied by auscultation of the chest in health. It has been customary to apply to the modifications of the respiratory murmur, as heard over the primary and secondary bronchi, the name normal bronchial respiration. This term is a misnomer. The respiratory sounds in this situation are never purely bronchial, but they have the bronchial and the vesicular characters combined. An appropriate name, therefore, is the

* Guttman.

† Guttman states that as indeterminate respiratory sounds cannot be compared with any other known sounds, it is impossible to describe them. The advantage of the analytical method of study is shown by the facility with which they are described by the characters pertaining to the pitch and quality of the inspiratory and of the expiratory sound. The endeavor to explain the mechanism leads this author into error as regards the significance of the so-called indeterminate sounds. Their significance is rationally understood when it is considered that they are not indeterminate sounds, but sounds intermediate between the normal respiratory murmur and bronchial respiration.

normal broncho-vesicular respiration. I need not add that the characters of this normal broncho-vesicular respiration are more marked on the right than on the left side of the chest; the area within which they are confined being the sternal portion of the infra-clavicular and the upper part of the inter-scapular regions.

Cavernous respiration was described by Laennec as having essentially the characters of bronchial respiration, the only difference being a sensory impression of air entering a large space. Subsequent authors have generally held that these two signs are not to be differentiated by intrinsic differences. Skoda affirms that they are absolutely identical, and in this he is followed by the most recent of German publications. The nearest approach to the characters distinctive of the cavernous respiration is the description of Walshe, in the early as well as the late editions of his work on diseases of the lungs.

The analytical study of respiratory signs led me to recognize well marked and easily-recognizable characters distinctive of cavernous respiration as long ago as 1852.*. This sign is to be differentiated, on the one hand, from bronchial respiration, and, on the other hand, from the normal respiratory murmur. The differential characters are as follows: The inspiratory sound, as compared with that of bronchial respiration, is low in pitch and non-tubular; as compared with that of the normal respiratory murmur, it is non-vesicular. It has a simple blowing quality. The expiratory sound differs from that of bronchial respiration in being low in pitch and devoid of tubular quality. The pitch is lower than that of the inspiratory sound. In pitch and quality it resembles the expiratory sound in the normal respiratory murmur. These characters, limited to a circumscribed space, without the boundaries of which is often found either bronchial or broncho-vesicular respiration, are readily appreciated, and they point unmistakably to the site of a cavity. The characters are so distinctive that the sign cannot be confounded with either bronchial or broncho-vesicular respiration. The liability to error is inconfounding cavernous respiration with simply weakened respiratory murmur, the only essential point of distinction being the presence of vesicular quality in the normal inspiratory sound, and the absence of this quality in the cavernous inspiration; hence, if the respiratory murmur within a circumscribed space be so weak that the vesicular quality is not clearly appreciable, it cannot be distinguished from feeble cavernous respiration. The associated vocal sounds should always prevent this error.

Cavernous respiration is not infrequently modified by solidification of lung surrounding or situated in proximity to cavities. A combination of the bronchial and the cavernous characters is some-

times rendered apparent within a circumscribed area by comparison with a purely bronchial or a broncho-vesicular respiration without the limits of this area. This modification may be distinguished as broncho-cavernous respiration. A cavity without adjacent solidification of lung may furnish a cavernous inspiratory sound, combined with more or less of the vesicular quality. This may be distinguished as vesiculo-cavernous respiration. It is recognized by comparison with the respiratory murmur without the limits of a circumscribed area, the latter corresponding to the site of a cavity. The fact of the existence of the cavity may be further established by associated vocal signs.

Other varieties may be mentioned. A cavernous inspiration is sometimes associated with a bronchial expiration. This happens in some cases when lung, completely or considerably solidified is in contact with, or in close proximity to, a cavity. The bronchial inspiration is not heard over the cavity, but the more intense bronchial expiratory sound extends beyond the solidified lung, and displaces, or, more properly speaking, drowns the cavernous expiration over the cavity. In another variety the expiratory sound is at its beginning either bronchial or broncho-vesicular, and it becomes cavernous before its termination. The probable explanation is that air enters the cavity, not at the beginning of the inspiratory act, but before the conclusion of the act; hence, prior to the development of the cavernous respiration the sound represents adjacent solidification of lung*.

As is well known, Laennec gave very little attention to the sounds produced by the expiratory act. A young American physician (James Jackson the younger) was the first to study these sounds, twenty years after the discovery of auscultation. Jackson ascertained the importance of a prolonged expiration, having something of the bronchial character, as a diagnostic sign in the early stage of pulmonary phthisis. The characters which a prolonged expiration may have are of importance when an inspiratory sound is present, but especially so when an inspiratory sound is either wanting or too weak for its characters to be appreciated.

The significance of a prolonged expiration depends on the characters pertaining to pitch and quality. If the pitch be high and the quality tubular, it denotes solidification of lung as if the respiration were completely either bronchial or broncho-vesicular; in other words, as if associated with either a high-pitched tubular or a vesiculo-tubular inspiration. If the pitch be low and the

* Vide Essay: "Trans. American Med. Association," 1852.

* Under the name metamorphosing respiratory murmur (*metamorphosirendes Athmungs gerausck*) Seitz has described a variety of broncho-cavernous respiration in which, using his terms, the first part of the respiratory sound is rude, and the latter part bronchial in character. Inasmuch as by German writers the cavernous and the bronchial respiration are considered as identical, the latter part of the respiratory sound, in the variety described by him, is probably cavernous.

quality non-tubular or simply blowing, it is either a cavernous sign or it denotes delay and hindrance to the free exit of air in the expiratory act, as in cases of emphysema. The prolonged expiration in emphysema is always low and blowing, not high and tubular, at least without the areas in which a normal broncho-vesicular respiration may be present. A prolonged expiration is not a sign of phthisis (exclusive of cavity), unless the pitch be raised and the quality more or less tubular; or, as stated by Jackson, unless it have something of a bronchial character.

I pass by adventitious sounds, simply remarking that my experience corroborates a statement made by Skoda—namely, the pitch of moist bronchial râles, or coarse and fine bubbling, and of the subcrepitant râle, denotes either, on the one hand, solidification around the tubes in which the râles are produced, or, on the other hands, absence of solidification. The pitch is more or less raised when these râles occur in connection with pneumonia, phthisis, or other affection involving solidification. The pitch is not raised when they occur in bronchitis, in pulmonary oedema, or in other morbid conditions which do not involve solidification of lung.

SIGNS REFERABLE TO THE LOUD VOICE AND SPEECH.

The analytical study of transmitted voice-sounds is simpler than that of the respiratory sounds, but not less important with reference to clearness and precision as regards the distinctive characters of vocal signs. Suppression of vocal resonance, and simple diminution of the normal intensity, are signs which do not call for analysis. It is not so with the remaining signs referable to voice and speech—namely, bronchophony, increased vocal resonance, ægophony and pectoriloquy.

Bronchophony, the sign correlative to bronchial respiration, is characterized by concentration of the transmitted voice, nearness to the ear and elevation of pitch, as compared with the diffusion, distance, and lowness of pitch, which are the characteristics of the normal vocal resonance. It is important to note that intensity is not an element of bronchophony; the distinctive characters of this sign may be not less marked with a feeble as with a loud vocal resonance.

An abnormal loudness of the transmitted voice-sounds, without the characteristics of bronchophony—that is, the characters of the normal resonance preserved exclusive of intensity—is to be distinguished as increased vocal resonance. This sign signifies either a degree of solidification falling short of that requisite for bronchophony, or the transmission of a voice through a cavity.* It seems

an incongruity, but clinical experience shows it to be true, that a moderate degree of solidification of lung may give rise to more intensity of resonance than a greater degree of solidification, the lesser resonance having the characters of bronchophony, and the greater resonance retaining the characters of the normal resonance exclusive of intensity. A cavity not surrounded by solidified lung may be represented by notable intensity of vocal resonance, but without the bronchophonic characters.

Normal bronchophony is sometimes found within the area in which the respiration may be normally broncho-vesicular. In general, however, within this area—that is, over the primary and secondary bronchi, the resonance is simply more intense than in the other thoracic regions.

The opinion held by Laennec, that pectoriloquy is exclusively a cavernous sign, has long since been disproved. Articulated words, or the speech, in addition to the voice, may be transmitted by solidified lung as well as through a cavity. The characters pertaining to the transmitted voice, associated with the speech, however, enable the auscultator to decide, in individual cases, whether the pectoriloquy be, or be not, a cavernous sign. If pectoriloquy be accompanied by the characters distinctive of bronchophony (nearness to the ear, and elevation of pitch), the transmission is by solidified lung; if, on the other hand, speech be transmitted, and the characters of bronchophony be wanting, the inference is that the pectoriloquy denotes a cavity. Two varieties of pectoriloquy, therefore, may be recognized—namely, bronchophonic and cavernous. This statement conflicts with the opinion of Skoda and others, who hold that pectoriloquy is simply an exaggeration of bronchophony.

I would remark that pectoriloquy, which may be defined the transmission of speech, is often not sharply discriminated by writers on auscultation, as well as by practical auscultators, from bronchophony—the latter being the transmission simply of the voice; and it is evident that the discrimination was not clearly made by Laennec. Laennec seems to have been biased by a desire to establish pectoriloquy as exclusively a cavernous sign. That pectoriloquy is entitled to be considered as a sign distinct from bronchophony is shown by the fact that it may exist without any of the characters of the latter. Under circumstances, in accordance with what has been stated, it is always a cavernous sign.

To the vocal sign called ægophony, Laennec in his treatise on auscultation, devoted more space than to any other physical sign; and perhaps there is no sign which has been more discussed than this by subsequent writers, although it is a sign of comparatively small practical importance, inasmuch as other well marked and readily available signs suffice for the diagnosis of pleural effusion. Laennec confessed that he encountered much difficulty in the explanation of this sign. That, as a rule, if not invariably, the sign repre-

* I dissent from the statement made by some writers that bronchophony is a cavernous sign. Clinical study, as I believe, shows that merely intensification of the resonance is the sign when the voice is transmitted through a cavity. The voice may be bronchophonic over a cavity surrounded by solidified lung, but then the sign represents the latter condition, and not the cavity.

sents pleural effusion, I do not doubt, notwithstanding the opinion of Skoda and others to the contrary.

Here, as in other instances, Laennec naturally sought to give an idea of the sign by comparisons. The name which he gave to it applies resemblance to the cry of the goat. He also compared it to the voice when a counter is placed between the teeth and the lips, to the voice transmitted through a metallic speaking trumpet, and to the nasal intonation which is assumed in the performance of Punch. Studied analytically, it has the concentration and the high pitch of bronchophony. It differs from the latter sign in being distant, and in its tremulous or bleating character.*

SIGNS REFERABLE TO THE WHISPERED VOICE.

The sounds heard over the thorax when words are whispered, have not, as yet, been recognized as forming a separate group of auscultatory signs. They seem to me to be entitled to this distinction. It is true that a whisper is almost always an expiratory act, and, therefore, the characters of the sounds thus produced are identical with those of expiration in the respiratory signs. The expiratory effort in a whisper, however, as a rule, has more force and emphasis than in the acts of respiration; hence, the characters of the sounds heard over the thorax are more marked; and, moreover, there is sometimes an advantage in listening to these sounds disconnected from the inspiratory sounds. Practically, the whispered voice will be found useful, especially in the diagnosis of incipient pulmonary phthisis.

The whispered voice, as heard over the healthy chest, may be called the normal bronchial whisper, inasmuch as the same is conducted by the bronchial tubes. The normal bronchial whisper is low in pitch, its quality is blowing, and its intensity in different persons variable, these characters corresponding to those of the expiratory sound in the normal respiratory murmur. The characters are normally modified over the primary and secondary bronchi, especially on the right side of the

chest, in the same way as the expiratory sound in normal broncho-vesicular respiration. The abnormal modifications may be named so as to correspond with the signs referable to the loud voice, as follows: 1. Increased bronchial whisper; 2. Bronchophonic whisper, or whispering bronchophony; 3. Cavernous whisper; and 4. Whispering pectoriloquy.

The whispered, as well as the loud voice and the respiration, may be amphoric; but I pass by now, as hitherto, this sign, for the reason that it does not require analytical study, the musical intonation being alone sufficient for its recognition.

The bronchophonic whisper is correlative to bronchophony referable to the loud voice, and to bronchial respiration. It is a high-pitched tubular sound, more or less intense.

Increased bronchial whisper is correlative to increased vocal resonance and to broncho-vesicular respiration. It is less high in pitch, less tubular, and less intense than the bronchophonic whisper.

The cavernous whisper is correlative to cavernous respiration. It is low in pitch, blowing in quality (as distinguished from tubularity), and of variable intensity.

In whispering pectoriloquy the speech—that is, articulated words—are conveyed to the ear of the auscultator. Whispered speech is oftener transmitted than words spoken with the loud voice. The whispered words may be transmitted either by solidified lung or through a cavity, and it is easy to determine, in individual cases, whether or not it be a cavernous sign. If the pectoriloquous whisper be also bronchophonic—that is, the sound high in pitch and tubular in quality—the conduction is by solidified lung. If, on the other hand, the whispered words be associated with the characters of the cavernous whisper, the conduction is through a cavity.

SIGNS PRODUCED BY PERCUSSION.

The advantages of the analytical method of study are as marked in its application to percussion as to auscultation. The results of the study, however, will require much less extended consideration.

Taking, as a point of departure, percussion in health, and the characters of the normal resonance as a standard for comparison, the number of morbid signs need not exceed six, and considering, as might be done, three of these as varieties of one sign, the number is reduced to four. Thus, either four or six signs represent the important morbid physical conditions incident to different pulmonary diseases, in so far as these conditions are determinable by percussion. An important result of the analytical method of study is the elimination of such vague terms as full, empty, hard, wooden, tracheal, bandbox, resonance, etc.

The normal resonance on percussion varies in different persons and in different parts of the chest,

*I refrain in this paper from entering into a consideration of the mechanism of signs; but, with regard to ægophony, I will venture to offer an explanation, which I do not remember to have met with in any work on auscultation. It is that the sign is produced when, owing to either old adhesions, or recent agglutination by fibrinous exudation, the pleural surfaces adhere in the upper part of the chest, so that the lung resists the pressure of the liquid; consequently the pressure upon the lung below the adherence condenses it to such a degree as to give rise to bronchophony. The bronchophony, under these circumstances, lacks the nearness to the ear which it has when liquid is not present, and the presence of the liquid causes the goat-like characters of the sound. This explanation tallies with the fact that the sign is generally limited to a narrow strip near the level of the liquid, and also with the fact that the sign is rarely found except when the level of the liquid is at or near the lower angle of the scapula. According to this explanation, as well as to the results of analysis, ægophony is a modification of bronchophony.

as regards intensity. As compared with all the morbid signs produced by percussion, it is always low in pitch. The quality is *sui generis*, and being due to the air vesicles, it may properly be called vesicular.

One of the signs is characterized by absence of all resonance or flatness. Of course this sign has no characters pertaining to pitch or quality of sound.

Diminished resonance or dulness is another sign. In this sign the vesicular quality of sound is decreased in proportion to the diminution of resonance or the degree of dulness, but more or less of the quality is appreciable. The pitch is always higher than that of the normal resonance of the person examined. The elevation of pitch is of practical value in determining a slight degree of dulness.

A third sign is tympanitic resonance. Intensity should not be considered as an element in the characters distinctive of this sign. A tympanitic resonance may be either more or less intense than the normal resonance of the person examined. The chief characteristic of the sign relates to the quality of sound; the resonance is devoid of vesicular quality. A resonance absolutely non-vesicular is always tympanitic. Tympanitic resonance and non-vesicular resonance are, therefore, convertible terms. The pitch is always higher than a resonance with vesicular quality.

The fourth sign is a resonance in which the vesicular is combined with the tympanitic quality, and the intensity of the resonance abnormally increased. I have proposed to distinguish the sign by the descriptive name, vesiculo-tympanitic resonance. The pitch is always higher than that of the normal resonance of the person examined. This vesiculo-tympanitic resonance is a diagnostic sign in cases of vesicular emphysema. It is the resonance found above the level of the liquid in cases of pleuritic effusion, and over the healthy lobe of a lung when another lobe of the same lung is the seat of lobar pneumonia.

In order to illustrate the characters of this sign, and also its practical value, I will state a problem in diagnosis:—

Let it be supposed that a patient having had cough and expectoration for a considerable period, together with deficiency of breath on exercise, is a subject for a physical examination of the chest. Over the upper anterior thoracic regions, on the right side, the resonance on percussion is found to be notably less in degree than over the corresponding regions on the left side. The difference, as regards intensity of resonance, between the two sides in these regions, is distinctly greater than the normal disparity. Now, if the relatively less intense resonance on the right side be considered dulness, this sign, in connection with the symptoms, points to the existence of pulmonary phthisis. But the relatively less intense resonance on the right side may not be dulness—it may be due to an abnormal increase of the reso-

nance on left side. If this be so, the greater resonance on the left side points to vesicular emphysema. The question whether the difference in the intensity of resonance between the two sides be due to an increase of the resonance on the left side (denoting emphysema), or to dulness on the right side (denoting phthisis), is to be settled by comparing the resonance on the two sides as regards characters other than intensity—that is, by the characters relating to pitch and quality. If the resonance in the hypothetical case which has been stated be higher in pitch, as well as more intense, on the left side than the resonance on the right side, it is a vesiculo-tympanitic resonance, and denotes emphysema. If, on the other hand, the resonance on the right side be higher in pitch than that on the left side, as well as less intense, it is dulness, and denotes a certain degree of solidification of lung.

The error of confounding phthisis and emphysema is not infrequent: two diseases differing widely in respect of gravity, and the latter protective in a great measure against the former. Assuming, in a case offering the problem just stated, the disease to be pulmonary emphysema, the relatively lesser resonance on the right side of the chest is, in fact, an increased or a vesiculo-tympanitic resonance, as may be shown by comparing the resonance on this side in the regions named with that of the resonance over the lower lobe of the lung on the same side. This is in accordance with the rule that vesicular emphysema, when not lobular or vicarious, is bilateral, affecting the upper more than the lower lobes on the two sides, and generally the upper lobe of the left more than the upper lobe of the right lung.

Amphoric and cracked-metal resonance on percussion may be considered as varieties of tympanitic resonance. They are covered by the definition of tympanitic resonance, that is, the resonance is non-vesicular. They are readily enough distinguished by their characteristics. Perhaps, in view of their significance as cavernous signs, it is more convenient to enumerate them as distinct signs.

I have endeavored in this short paper to give an exposition of the method of study which, as it seems to me, secures for auscultation and percussion simplicity, together with completeness and precision in their application to physical diagnosis, and I have submitted results to which I have been led by pursuing this study as a branch of clinical medicine. If the tone of my paper may have appeared to show undue assurance—or even dogmatism—I would plead in extenuation that in order not to presume too much on the patience of my hearers and readers, I have sought to condense the matter as much as possible. As a further plea, I may add that I have for many years been a student and teacher of auscultation and percussion, and that I have reached the age when some indulgence may be claimed on the score of no longer remaining among the junior members of our profession.—*Gaillard's Med. Journal.*

THE MANAGEMENT OF ECZEMA OF THE ANUS AND GENITAL REGION.

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Demilt Dispensary, New York, etc.

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The misery endured by patients affected at all severely with eczema about the anus or genital region can be little understood except by those who have thus suffered, or who have had much to do with those thus afflicted. From the number of these cases which have come under my care, and from their previous duration, I fear that the importance of the disease in this locality is not fully appreciated by the profession, and that the measures which will give permanent relief are not as well understood as they might be. It has occurred, therefore, that a practical consideration of the subject might not be without interest at the present time, hoping that thereby some may be enabled to give relief to many of these distressing cases, whose existence, I am sure, is far more common than is generally supposed. Thus, of 700 cases of eczema occurring in my own private practice, there were seventy-three in which these parts were invaded, or over ten per cent. of the whole number. The records of my dispensary and hospital cases have not been kept with sufficient accuracy to allow of analyzing them in this respect; but, from the very many instances which I have seen in public practice, I think I do not exaggerate in placing the ratio at at least one-tenth of all the cases of eczema. That statistics do not represent the real frequency of the disease is evident, for I know that sufferers from eczema of the anus or genital region often, if not generally, hide their trouble until it is no longer bearable; especially is this true of females. The reasons for this concealment are several. Shame undoubtedly prevents many from exposing disorders of these parts to the knowledge of others. The idea is more or less prevalent that any disease in this region may have some connection with sexual transgressions. Again, many with eczema of the anus imagine that they have "piles;" indeed, cases of this trouble very often pass among the general profession as "itching piles," while, of course, every disease about the anus is thus named by the "pile doctors" to whom these unfortunates often apply. Eczema about the genital folds also often passes for simple chafing, until it is deep-seated, and the long continuance of the causes and results have rendered the condition very rebellious to cure. Still another cause operating for the continuance of these cases and neglect of treatment, it must be acknowledged, is the feeling which has long pervaded the people that disease affecting the skin is a special dispen-

sation of Providence, which it is wrong or useless to interfere with, or which will, in some way, right itself; while, no doubt, there has been also the feeling that affections of the skin were not amenable to treatment to the same degree as are other maladies. Happily, popular and professional scepticism in regard to the success of the treatment of skin diseases is fast passing away before the rapid progress which has been made in dermatology within the last five-and-twenty years, so that this once-neglected department may now be reckoned one of the most certain branches of medicine, if, indeed, it is not the most certain and definite in the matters of diagnosis and treatment.

Eczema of the anus and genital region does not differ essentially from the same disease as manifested elsewhere, and my object in treating of the eruption in this particular location is to call special attention to its frequency, its obstinacy if not properly managed, and last, but not least, to some of the measures which I am constantly using with success in its removal. While, as has been remarked, the disease does not differ in nature from eczema of other parts, there are some peculiarities in its phenomena and their treatment to which it may be well to call particular attention for the text-books are meagre so far as relates to this special manifestation of eczema.

Acute eczema of the anus is not very common, but is seen more or less frequently on the genitals. Its management generally presents but little difficulty, and differs little, if any, from that of service in a similar state elsewhere. Rest, absorbent powders, or lotions with a powder in them, generally suffice. The present paper has to do with those many cases of chronic eczema where the disease or irritation has lasted for weeks, months, or years.

All degrees and grades of this eruption may be observed in the regions under consideration, and often those cases presenting the least external signs will give the most distress. About the anus we may sometimes have but a slight amount of thickening of the muco-cutaneous surface, with a little purplish congestion and perhaps a few rather superficial excoriations or abrasions in the folds of the opening, and yet the distress with itching and pain may be intense, and prevent or greatly disturb sleep, and even rob the patient of peace and comfort. Or, again, there will be very little to be seen on a scrotum, except some marks of scratching, and on close examination only a moderate thickening of the skin is felt on pinching the part, and yet the annoyance, or even distress, of the itching will be such as to be a real burden to the patient. We may also have much the same state of affairs existing about the female genitalia, and, though not presenting much to the eye, the condition may be the occasion of great suffering. In each of these instances there is a deep sensation of itching for which they will pinch, or press, or rub, or scratch the part, and even thus can only with difficulty reach the seat of annoyance; nor can these

patients by force of will abstain from thus seeking relief.

Many of these cases have been called pruritus, or even prurigo of these parts ; but in by far the larger share of cases the real trouble will be found to be an eczema, which sooner or later would or does develop into more characteristic features.

But the really severe cases show, of course, manifold more external signs of the disease, and we may have the entire anal region the seat of a greatly thickened, red, moist, exuding surface. Very often the condition even seems to be only a whitened, soggy state of the parts between the buttocks, the natural furrows in the mucous membrane being deepened, and some few abrasions being seen. This condition gives rise not only to periodical or permanent itching, but even to great pain on sitting, or during defecation. This state may effect the region of the anus alone, or may extend to and involve the entire male and female genital region ; or these latter may be affected alone, even to a very severe degree, without the process extending to the region of the anus.

Eczema of these regions is by no means always associated with eczema on other parts of the body, for in some of the worst cases which I have been called upon to treat there has been no sign of cutaneous disease except upon the anus or genitals, or both, although I have also frequently seen it associated with a similar eruption elsewhere, or with a history of preceding eczema of other parts.

I will not occupy your time with entering upon the exact clinical features of eczema in the locations under consideration or of the differential diagnosis from other lesions likely to occur here. I will only remind you of the absolute necessity of a correct diagnosis in this as in other diseases of the skin, without which, of course, no management can be successful. This remark is not as unnecessary as it may appear to some, for I have seen a number of cases where quite different states have been regarded as eczema by those who had previously seen the case.

It is well always, as a matter of routine, to eliminate the matter of pediculi pubis, for they may be sometimes found, as also the other varieties of the pediculus, even in the highest walks of life, and may give rise to an itching which closely resembles that of eczema, and the subsequent scratching may cause abrasions simulating this eruption.

Scabies should always, also, be borne in mind, for in males lesions are very commonly found on the penis and scrotum, and it would be quite possible for the manifestations elsewhere to be very light, or to have been removed by treatment while they remained on the penis or scrotum. Or, again, very severe treatment for scabies may have left behind it an artificial inflammation resembling eczema.

One of the most common complications of eczema in the genital region, and also the lesion which perhaps is most often mistaken for it is the

vegetable parasitic eruption, the so-called eczema marginatum, or ringworm of the thigh—*tinea trichophytina cruris*. As remarked, this may be a separate affection or it may complicate an eczema and occasionally we observe at one and the same time the characteristics of the parasite disease : the sharply defined margin advancing as the surface clears more or less behind it, and the irregular, blotchy patches of eczema near by. The eczema may exist first, and the parasite, finding an appropriate soil, may grow upon it ; or the parasitic eruption may be of old date, and the eczema may develop upon it from the severity of the itching and the stimulant applications given to relieve it, or from the scratching itself. Now, unless this parasitic element is recognised and met therapeutically, the case will prove most rebellious.

On a number of occasions I have seen syphilitic lesions about the anus and genital region which had been called eczema and treated as such. I need but suggest this, for the lesions of the two are so markedly distinct when carefully considered that they should never be confounded.

Herpes of the genital organa is more frequently mistaken for venereal ulcers, but may also resemble eczema in a measure, and should always be differentiated.

Finally many cases of pruritus of these parts undoubtedly do occur which should not be classed as eczema, although, as remarked first, more cases are probably classed as pruritus and prurigo of these regions which are in reality eczema, than there are cases of pruritus which are called eczema wrongly. On several occasions I have seen the pruritus accompany glycosuria develop an eczema, and I have seen as a further complication a distinct eczema marginatum or ringworm formed later.

This is not the time or place to enter upon an extended study of the nature or causes of eczema in general, nor to give views as to its prognosis. As regards, however, eczema affecting the regions under consideration, I may say that I do not regard it as of local origin, but that it invariably indicates a state or habit of body which, unless it is properly reached, will certainly render the affection incurable. On the other hand, I firmly believe, and know from experience, that if careful, proper and sufficient care be taken of these cases in every respect, they are most certainly curable, and that permanently ; unless indeed, the patient again transgresses all rules and excites a fresh attack, which need not happen, and which is rare in those who have been faithfully treated. I refer of course, to the intelligent patients of private practice, for, however valuable public practice is for diagnosis and teaching far less reliance can be placed on therapeutical deductions there formed than on those obtained by the careful study of private patients.

It will be understood here, however, that I by no means ignore local causes as determining agents in the production of the eruption at any particular place and time, for this is confirmed in regard to eczema of other parts as well. Thus I have no

doubt but that the irritating nature of some vaginal and uterine secretions may provoke a pruritus which may end in an eczema. Also, the perspiratory or sebaceous secretions of the parts in question may perchance be more irritating than usual, or may have been confined and become decomposed, and thus act as a local excitant; a neglected erythema intertrigo may develop into a very intractable eczema. Irritating under-clothing, as also bad water-closet paper, may afford the primary cause, and perhaps many other local elements may be of more or less importance, and should of course, be taken into consideration in the management of the eruption.

But all these—indeed, many local causes may exist in certain individuals and yet never provoke an eczema; and they may even have occurred to the same person on previous occasions, and yet have proved innocent. There certainly is some other state or element which requires to be recognized and met in order to give these patients perfect and permanent relief.

The most common single, general symptoms observed in patients with eczema of the anal or genital region is constipation, or, as it might be more properly called imperfect intestinal excretion, generally with faulty liver-action; indeed this almost invariably exists to a greater or less extent, and requires to be looked for and managed properly. So commonly have I found this in the very considerable number of cases of eczema of the anus and genital region which have been under my care, that I had felt that I could almost state it to be an invariable accompaniment of this condition; but on going over my notes of cases, I find a certain small proportion in whom it is stated by the patients that the bowels acted regularly once or twice daily. This is not, however, convincing proof to me that the intestinal action was perfect, and I still believe this to be the most important single factor in the disease. Quite possibly the irritating character of the excrement itself is an efficient local cause of the presence and continuance of the eruption.

This imperfect intestinal excretion should be corrected, if possible, and very great care will sometimes be necessary to accomplish this. It is not enough to give occasional purgatives, nor even to prescribe daily laxatives; for, unless much caution is exercised, the ultimate result in this direction may be bad instead of good. These remarks in regard to the management of this important element may seem trite and out of place before this learned body, but I wish to impress the very great importance of dealing with this portion of the treatment rightly as a *sine qua non* of the successful management of eczema of the parts under consideration.

All the elements which conduce to bring about a healthy action of the bowels and organs of digestion must therefore be attended to, and, consequently, in the treatment of eczema about the anus and genitals we must not be content with a

few general directions, or the prescription of one or another purgative or laxative remedy. On the contrary, it may require no little trouble to ensure a healthy evacuation of the bowels daily, and this is accomplished by diet, exercise, regularity in attending to the call of nature, and such assistance from medicine as may be necessary.

A very common accompaniment of eczema of the regions under consideration is a greater or less congestion of the portal and hemorrhoidal circulation, manifested by a purplish congestion of the mucous membrane of the anus, or very commonly by a greater or less degree of internal or external piles. These latter may not be sufficient to be recognized by the patient, and yet be an element indicative of the existing state which must be regarded. It is well, therefore, in examining patients thus affected, to have them strain or bear down to bring the deeper portions to view.

When this congestion of the hemorrhoidal vessels exists I almost invariably give the time-honored mixture of precipitated sulphur and cream of tartar, in quantity sufficient to secure one or two loose movements from the bowels daily. I never give it with syrup, as I believe this often ferments or acts prejudicially in the stomach and in a measure impairs the good effects. I order a mixture of the sulphur and bitartrate of potassa in equal quantities, and direct that from one to two teaspoonfuls be taken at night on retiring, rubbed up with water into a paste. The dose is not a very pleasant one, but it is readily taken, even by ladies.

Where there is no marked hemorrhoidal congestion I employ a pill of two grains and a half each of blue mass and compound extract of colocynth, with a quarter of a grain of powdered ipecac in each pill; two such pills to be taken at night and two on the second night after, followed each morning by a seidlitz powder or Kissingen water. These pills are to be taken only twice, and are not resorted to again at a less interval than a week or two; but they may be thus used repeatedly with good effect.

If there is simply a sluggish action of the bowels I have had most excellent results to the accompanying eczema from the use of a pill composed of half a grain of the extract of socotrine aloes with a grain of dried sulphate of iron and a little aromatic powder and confection of roses, one pill being taken directly after eating. Very much may be accomplished by this combination in the way of permanently overcoming the constipated habit if the pills are employed regularly and systematically according to the following directions: as first one pill is taken directly after each meal, three times daily; in a few days the noon pill is omitted, and a few days later one is taken after the evening meal only, and soon this is required less frequently, and subsequently omitted. The point to be insisted on is that the pills shall be used regularly in the above manner until the bowels acquire the habit of daily excreting and discharging a normal amount—if they are

taken irregularly, simply for a cathartic action, no ultimate good results follow; but I can bear testimony very strongly to the value of this plan of treatment, and could adduce many cases where this has constituted one of the chief means of speedy and permanent cure of long standing cases of eczema of the anal and genital regions.

It is a very common custom with many to give mineral waters to these patients, with the simple direction that they keep the bowels open therewith. In my experience this is an unwise procedure, and I believe that many persons are to-day suffering from constipation and consequent eczema of the lower region because of the constant stimulation of the intestinal tract with these or other purgatives, while the cause of intestinal inactivity—sedentary habits, over indulgence at the table, etc.—has been allowed to go on unchecked. I never order mineral water to be taken for a length of time, and constantly discountenance their use.

Nor is it at all sufficient, in these cases, simply to secure an emptying of the lower bowel by means of an enema, even if employed daily. In my judgment enemata are to be used only very rarely for a definite purpose, and the habit of a dependence upon water injected to excite the intestines to contraction is worse even than to have them depend upon mineral water poured into the other end of the digestive tube. Nor will an action of the bowels secured by enema at all help an eczema of the anal or genital region, for I have seen some very bad cases of the eruption in this locality where this means of emptying the bowel was practised.

I will not here enter more largely into this subject, which is a prolific one, nor will I detail further remedies which might be of service; but I have dwelt on it thus long because the more I see of these cases the more convinced I am that imperfect liver-action and imperfect intestinal excretion are at the bottom of very many of them. As mentioned before, he will but poorly treat these cases who contents himself with prescribing in a routine manner this or that remedy, which has been proposed or vaunted, and he will but poorly manage the intestinal excretion who is satisfied with giving casual prescriptions to loosen the bowels. The physician must give definite instructions to the patient in regard to his mode of life, diet and hygiene, and must even extend it to securing that the call of nature, thought it be light, be answered promptly at a regular time each day, preferably after the morning meal.

Next to imperfect bowel-excretion I would place deficient kidney action as an element to be regarded in the cases under consideration. The urine of these patients is seldom that of health; the most varied conditions may be reported, but not all infrequently it is recognized by the patient as leaving a deposit in the chamber and staining the same. Frequent and imperative micturition is not at all uncommon, and the repeated calls to urinate at night and the itching will

often act and react on each other, rendering sleep almost impossible.

Most of these cases, therefore, require also an alkali, and I find the best results from acetate of potassa with a bitter, as in the following mixture

R. Potass. acetatis..... ʒj.
Tinct. nucis vomic..... ʒij.
Infus. quassiae..... ʒiv.
M. Teaspoonful after eating, in water.

This is often continued during the entire course of treatment, and frequently for some time after the complete disappearance of the eruption and cessation of all itching.

Not infrequently, however, cases of eczema of the anus and genitals will be associated with a large amount of oxaluria, and will be quickest relieved by the strong nitric acid internally, in doses of about two drops after eating. The well-known mixture of sulphate of magnesia, sulphate of iron, sulphuric acid, and infusion of orange-peel, is sometimes of much service, especially when there is a tendency to sluggishness of the bowels, which does not remain corrected with diet, etc., after a course of the pills mentioned.

In some cases the disease is largely due to simple debility, and iron and other tonics which give life and tone to the system will do the most good to the eczema, often in the way of rendering the processes of assimilation and disassimilation more perfect, whereby the liver, bowels and kidneys share the healthful activity.

These are the main internal remedies of service in this oftentimes very troublesome affection, and if the homely measures I have briefly alluded to are faithfully carried out and combined with proper local applications, they will, I am confident, secure the permanent removal of a complaint which is at this moment rendering many individuals very uncomfortable, if indeed it is not in some cases almost making life a burden.

It will be noticed, perhaps, that arsenic has not been mentioned, and yet I am positive that one-half of the general practitioners would give arsenic at the first visit to one suffering from the conditions under consideration. I will say that I had *not* purposely omitted mentioning arsenic, but that merely it had not occurred to me to speak of it because, probably, I so seldom use it for these cases. When there is a marked eczematous habit, and when, after all the above measures have been attended to, and others perhaps in the same line, if, then, there remained a tendency to the disease, I might and do employ it in connection with other remedies, but never as a curative measure at the beginning of the case, especially never in cases presenting acute symptoms. As a modifier of the nutrition of the skin, arsenic holds a high place among other medicines, but not as a controller of congestion or inflammatory action.

If internal and general measures are important in eczema of the anus and genital region, local

measures are, if possible, of even greater importance; it is much not to do the wrong thing, and still more to do just the right thing. This remark is made because one occasionally sees cases which have been greatly aggravated by previous treatment, which yield promptly to proper measures. The main point to be ever borne in mind in the treatment of these parts is that more harm than good may be done by too strong applications and that the soothing plan must be followed as far as possible, certainly while there are signs of inflammation, stimulating measures being adopted only in later stages of treatment and to remove the remains of the disease, as thickening of the skin, and not for the arrest of the eczema.

The itching of these cases is often most intense, and the patient will plead that if he can only have something to stop the itching the disease will get well. And so I have repeatedly had cases where all sorts and kinds of measures had been previously prescribed with a view of arresting the itching, but in vain, whereas the case yielded speedily when complete treatment was instituted, including only very mild local measures. Quite recently a physician brought a patient in consultation, not in regard to any general management of the case, but only to have my opinion in regard to the probable utility of applying the actual or galvanic cautery to the parts to arrest the itching. And so I have had cases which had previously been given stronger and stronger local applications, with a view of checking the itching, after the failure of recognized neurotic local remedies, until the parts had been brought to a terrible state of inflammation from such applications as strong citrine ointment and the like. Now, while these may succeed in some cases in which, perhaps, a transient, digestive disturbance was the starting-point of the eczema, I am confident that in the main all such attempts in the way of a local treatment of eczema in these parts is false in theory and injurious in practice.

The measures which I am about to detail may be simple, but will in most, if not all, cases, be sufficient as local treatment, provided that all else has been carefully attended to, as implied in the preceding brief mention of dietetic, hygienic and internal medication.

I place great reliance upon hot water as a means of relieving the congestion of the parts and the consequent itching. But the water should be indeed hot, and not warm—so hot that the hand cannot be thrust wholly into it—and it should be used in exactly the manner now to be described. I speak thus positively because I occasionally hear it asserted by patients that it is not of service, and on inquiring I find that the exact rules have not been followed, or that it has been used for a longer time, or oftener than prescribed. The patient should sit on the edge of a chair and have a basin with the very hot water and a soft handkerchief in it. This latter is then picked up and held in a mass to the anus or genital parts, as hot as can be borne, say for a minute, and then dipped in the water

again, and the process repeated three times, the whole not lasting more than two or three minutes; too long bathing, or too frequent sopping of the part, or rubbing with the cloth, etc., makes matters worse.

Before the hot water is gotten ready, I have the ointment which is to be employed spread thickly on the woolly side of surgeon's lint, cut of a size to cover the affected parts only, and laid close by ready for immediate use. After the parts have been soaked with the hot water for the prescribed time, they are rapidly dried by pressing a large, soft linen napkin upon them, with absolutely no friction, and the already spread cloths are immediately applied, the object being to at once exclude the air entirely. Ordinarily it is necessary to use the hot water only a single time in the twenty-four hours, namely, after undressing, and when ready to get into bed. It must be premised that the patient is to so manage as not to indulge in the usual scratching before undergoing these manipulations. If this desire is given way to beforehand, the treatment will not always control it at once; but if the patient can avoid even touching the parts except as described, he or she will commonly be quite able to go to sleep immediately. I have repeatedly had those thus afflicted say that the first night of treatment was the first real rest they had had for months or years.

If the case is very severe, and if there are spells of recurrent itching, the hot water may be repeated occasionally; but it is commonly sufficient simply to renew the ointment one or more times in the day, especially in the morning on rising, without the repetition of the hot water, which latter, I think, sometimes acts prejudicially in softening the parts if used more frequently. It should be added that the ointment should always be spread on lint, and never be rubbed to the part; also, that in applying the lint it should be kept in close apposition to the diseased surface, and that by means calculated to heat the parts as little as possible; and, finally, that in renewing the dressing the fresh cloth should be spread and ready near by before removing the previous one, that the access of air to the parts may be prevented by changing the coverings as quickly as possible.

The ointments employed must vary somewhat with the case, and no single one could be mentioned which would be invariably of service. That which I most commonly prescribe is made as follows:

R. Unguent. picis..... ʒj.
Zinci oxidi..... ʒij.
Unguent. aquæ rosæ (U. S. P.)... ʒiij.
M.

This should be of a consistence which spreads easily and remains soft, which may be easily regulated by varying the proportion of the spermaceti in the rose ointment or cold cream. I may add that I never employ the recent products of petro-

leum, cosmoline and vaseline, as a basis for these ointments where protection of the surface and exclusion of air is desired, as they have not body enough to remain as a thick coating upon the limb, but rapidly soak in and leave the parts dry and exposed.

I will not occupy time with further details of ointments, as this is sufficient to indicate the plan or idea of treatment which I wish to present as offering success in the class of cases under consideration; while the ointment is not a matter of indifference, the same result can be obtained, I believe, by other remedies than the one mentioned, and my case-records would undoubtedly show many others of value. It is the method of employing remedies and strict attention to details which give success, and I feel certain that the points I have given are very important and will be of the greatest service if carefully carried out.

Brief mention might be made of other applications which have rendered me good service, although, as before remarked, remedies must vary for different cases, and it is beyond the limits of the present paper to detail all that might be used and to give their possible indications. The following combination is very effective:

℞. Unguent. picis	3 iij.
Unguent. bellad	3 ij.
Tinct. aconit. rad	1 ss.
Zinci oxidi	3 j.
Unguent. aquæ ros	3 iij.

M. Ft. ung.

The ointment of chloral and camphor, of each a drachm or two to the ounce, will often prove a very efficient anti-pruritic, as first described by the present writer several years ago.

Lotions are sometimes of much service, especially in eczema of the penis and scrotum, and the following can be recommended:

℞. Bismuth subnitrat.....	3 ij.
Acid. hydrocy. dil.....	3 j.
Emuls. amygd.....	3 iv.

M. Ft. lotio.

This of course must not be used where the skin much torn or broken.

A word may be added in regard to the employment of stronger local measures, for they are not infrequently of value in proper cases and at the proper time or period in the disease. When congestion has ceased, and there is still some thickening and a tendency to slight cutaneous fissures, we may use the green soap or the compound tincture of green soap.

℞. Saponis viridis,	
Olei cadini,	
Alcohol.....	a a 3 j.

M.

with good effect. With this we need friction, and a piece of muslin (subsequently white flannel may be used to give greater friction) is wet with the lotion and rubbed briskly over the parts for a few moments, which are then to be immediately covered with a mild ointment. For this purpose the ordinary zinc ointment, half a drachm to the ounce of the unguentum aquæ rosæ (U.S.P.), answers well, or the subnitrate of bismuth or calomel either in the same strength. We may also use with good effect the unguentum diachyli of the German Pharmacopœia, as introduced by Hebra; but this is apt to be too stimulating for some skins. It is quite as well not to have any tar in these ointments, because, having stimulated with a tarry lotion, the parts need complete rest. We may sometimes obtain excellent results from the use of caustic potassa in solution, used in much the same way, but some caution will be necessary in order not to overstimulate the part. A lotion of five to ten grains to the ounce is all that can be borne in many instances; but if carefully applied, especially by the physician, one of the strength of fifteen, thirty, or even sixty grains to the ounce, may be quickly brushed over the part, and cause an exudation which is followed by relief to the itching and diminution of the disease. These strong applications are to be advised with caution, and care should be taken that soothing measures, as cold-water dressings, are employed afterward.

When the tendency to slight fissures of the muco-cutaneous fold still remains, we will have great benefit from touching the latter carefully with a stick of pure nitrate of silver, and afterwards packing in a little cotton upon the parts. But I must advise this also with caution, because one of the worst cases of acute eczema of the scrotum and anus which I ever had under my care, and which had confined a gentleman to bed for several weeks, was started up by having an old eczema of the anus thus touched with lunar-caustic by a gentleman of great eminence in the profession; in a case of my own also there was very considerable inflammation excited by a similar application made by myself, but it passed off in a day or two, and with great subsequent benefit to the parts.

Time does not permit me to go into the subject more fully, though there is very much more which might be said. Eczema about the female genitals presents some features still different from those mentioned, and often proves very rebellious, but is in the main entirely amenable to very carefully directed treatment on the plan of that here detailed, and that in a reasonably short time. When considering the matter of diagnosis, mention was made of the frequent occurrence of a vegetable parasitic eruption about the genital region, the eczema marginatum of former writers, and of the liability of confounding it with eczema of these parts. The rather sharply-defined border of the eruption and the tendency to clear in the centre are points which will first attract attention to this tinea or ringworm of this region, and frequently, though

not always, the parasite, the same as in tinea tonsurans and circinata, may be made out in the scales by the microscope. When this is determined to exist, we may at once use anti-parasitic remedies, or it may be necessary first to treat the eczema element for a while until the acute inflammation has in part subsided, in the manner previously detailed, and afterward the parasiticide may be applied without causing irritation. The parasiticide which I most frequently employ is the strong, undiluted sulphurous acid, freely bathed on the part, which will give the greatest relief to the itching, and if persisted in will, singly and alone, cure the case. But, as I have frequently mentioned elsewhere, the sulphurous acid must be fresh (and I always instruct the patient to procure an original, unopened package), for, if used as ordinarily found in the drug-shops, it has altered by constant exposure to the air, and the SO_2 has become sulphuric acid, SO_3 , and is of course very irritating and not efficient as a parasiticide.

Eczema of the anus and genitals is not infrequently seen in children, and causes great distress. I have had a number of cases which had been rebellious, but which yielded to the principles already discussed.—*N. Y. Medical Record.*

TREATMENT OF ECZEMA.

By R. M. SIMON, B.A., M.B., CANTAB.

What is eczema? Recent pathology has made it tolerably clear that it is a catarrh of the true skin, an inflammation, acute or chronic, with hyperæmia, proliferation of existing tissue elements, and exudation of blood elements. Accepting this view, which appears proved, how many independent skin diseases we can remove from our classification, and how easily can we see the relationship between hitherto separated affections. We can see how the simplest form of skin catarrh, the simple vascular engorgement, which we call erythema, may pass by slight exudation underneath the epidermis into the condition of macules, by a greater local irritation, causing proliferation of existing cells into the papule; and how the papule may, by passage of the serum through the lower epidermic strata, become a vesicle: the vesicle, by fatty degeneration of its contents, become a pustule; and how such affections as impetigo and ecthyma differing pathologically only in the size of pustules, be referred to their true classification. Surely it would be better to give up the name of eczema, seeing that we often have cases of popular eczema, without any obvious exudation, and for all this class of cases substitute the name dermatitis.

This very brief summary of the pathological anatomy of eczema seems necessary before commencing the discussion of its treatment, as by remembering our definition we at once enlarge the limits of the disease and simplify the use of remedies. For example, remembering that the

prime factor in its causation is local hyperæmia, we can trace the connection between the troublesome eczema of the lower extremities and varicose veins with their attendant venous congestion, while a recognition of the cause suggests a remedy, for half a cure is often effected by placing the leg in a position of mechanical advantage, or by the use of carefully adjusted means of support, and especially Martin's bandages. I say half a cure, for long standing congestion, such as the one under consideration, produces changes in the skin which require further treatment.

The recognition of the true pathology of eczema has been the work of comparatively recent years and while great credit has been rightly accorded to the Vienna school of dermatologists, and great success and reputation have followed the work of Hebra and others, based on pathological considerations, the danger of extolling local treatment to the neglect of constitutional has been incurred to a great extent. German dermatologists have run to the extreme of denying constitutional causation; English ones, on the other hand, have assigned to local conditions, too little importance and each school has accordingly been too restricted in treatment adopted. The one relying on internal, the other on external, treatment.

Few will deny that rachitic children are more liable to eczematous eruptions than more healthy children, while none, I think, would attempt to treat such cases without the use of cod liver oil and other tonics. All of us must have seen the almost immediate benefit resulting from the administration of anti-gouty remedies in cases which have perhaps resisted all the ingenuity of local prescriptions, without a knowledge of the fact that a gouty diathesis was at the bottom of the mischief. We recognise that bronchitis, asthma, dyspepsia, may be traceable to a gouty diathesis; but few admit that skin affection may also be so referred, and unfortunately such as are of the most intractable nature. One of the most difficult forms to treat, namely, that of dry eczema, or eczema associated with slight exudation about the fingers and palms of the hands, is almost invariably of gouty origin, and is always benefited by iodide, potash and colchicum. No doubt the antagonism rises in great measure from the former excessive use of arsenic in all skin diseases. While the value of arsenic is undoubted on the grounds of its influence on the formation of the epidermis, its use is becoming more and more rare in general dermatology. It is only in squamous eczema that I advocate its use, believing that in no other cases of eczema is it of any benefit.

Any one may have an attack of eczema, and it will always be necessary to seek a cause. With some it may be gout; it may depend on irritation arising from trade causes, as from handling sugar, or lime, or flour, causing a condition known as grocers', bricklayers', or bakers' itch. Scabies, which depends upon the presence of the acarus, is a frequent cause of eczema: partly on account of

the intolerable itching and consequent scratching, causing diffused formation of vesicles, etc., and perhaps more often on account of the too long persistence in treatment by sulphur.

Having then been able to find a cause, local or constitutional, for the disease, and having, if possible, removed the cause, or tried to remedy the constitutional taint, we are brought to the problem of how to relieve the local symptoms, and removed the formed products of the inflammation. Cases of acute eczema are rare, and if not interfered with too much tend to recovery. The duty of the medical attendant is not to cure the disease, but, if possible, alleviate the symptoms. The patient complains of a burning heat, there is considerable swelling of the affected part, and sometimes the formation of innumerable vesicles. Let alone, or treated only by soothing remedies, the swelling goes down, heat disappears, and a slight desquamation alone remains. Poultices frequently used generally do harm in this stage; the warmth does not relieve the irritation of the peripheral termination of the nerves, and the external irritation of the poultice often extends the disease. The best means is the use of soothing lotions, and I know none better than one containing two grains acetate of lead, and five minims dilute hydrocyanic acid to the ounce of distilled water. Soft linen rags must be dipped in the lotion, applied to the part, and changed as often as they become dry. Cold water rags may be used in the same way, but it must not be attempted to keep the linen moist by covering it with oil silk; for by so doing the application soon becomes a warm one. I would remark on the great importance of using soft rain or river water, or distilled water, in the making of lotions—the salts in the hard water are themselves irritants, and aggravate the malady. Cases of acute general eczema of this kind are very rare, but such is the usual commencement of a severe local eczema, and should be treated as I have suggested; dusting the parts with powders, of which a good one is composed of equal parts of oxide zinc and starch has been recommended by many; but I have not found it expedient to use them, except in the so-called eczema intertrigo, which results from the rubbing together, especially in fat people, of contiguous parts, as the scrotum and thigh, the nates, or the fold of the thigh and groin in infants. The object of treatment is to keep the parts dry, and make them less likely to irritate each other by contact, but the object is better attained by keeping moistened lint between the parts, and so preventing contact. It is, however, of the utmost importance in the acute stage to avoid the use of irritating ointments, and indeed there is no indication for their use. There is no extensive infiltration; there are no formed elements of inflammation, and the skin, if swollen and hot, is still supple. Acute eczema then generally improves, hyperæmia disappears, and perhaps a little desquamation alone results to tell of its presence, but sometimes this is not the case. The disease

passes from the acute to the chronic condition, we no longer have burning heat, but an intolerable itching takes its place, aggravated by warmth. Vesicles are formed; or of some the epidermic roofs break down, moistening the surface of the skin with an albuminous exudation: in some pus takes the place of serum, and we get a crop of pustules, which by bursting leave scabs and crusts. Owing to the excited scratching the disease is extended, and in other parts erythema is set up and papules are formed. So here we have, as the result of an acute eczema, scales, crusts, vesicles, pustules, papules, and erythema. Are we now to describe the secondary disease as a case of *E. erythematodes*, *E. impetiginoides*, *Eczema vesiculolum*, *E. lichenoides*. I think it is obvious such a description would be satisfactory to none. The picture I have drawn is a very common one, and furnishes to my mind a very strong argument for a diminution of our dermatological phraseology. Let us speak, if you will, of a papular eczema, not of eczema lichenoids, and by so doing we shall better remember our pathology, and I feel sure be more successful as we try to be more scientific in treatment.

Having then a case of chronic eczema, much will depend upon its seat, especially whether it occurs on hairy or non-hairy parts, or whether or no there is much infiltration of the part and on the presence of crusts or scabs. Crusts and scabs do not occur to any great extent on non-hairy parts, as they are rubbed off by contact with external objects, but they cling to the hairs on the head or face, and constitute a serious difficulty in treatment. They must be removed, and this point must be insisted on. I generally order the head to be well anointed with any oil, sweet or almond being preferable, and a flannel cap to be worn day and night until the crusts are sufficiently softened to be removable by the fingers or a comb. Should this means fail, a poultice will always effect our object. Cutting off the hair short is not in the majority of cases necessary; but removal of scabs is a *sine qua non* for success. Having done this, say in a case of eczema capitis, the question of further treatment arises, and we must start by remembering two points of importance; first, that if the air be allowed free access to the discharging surface, crusts will inevitably again form, and the trouble of removal again rise; secondly, that frequent washing keeps up the irritation, and soddens the parts, so that our ointments do not adapt themselves exactly to the affected places. While we have a condition in which pustulation is going on, ointments should be used of a soothing character, and I know of none better than the unguentum zinci oleatis. It does not really much matter what ointments are used. The point of importance is that the ointment be used in large quantities, thickly plastered on, and be an effectual barrier against admission of air. Under this treatment pustulation soon ceases, scabs no longer form, and the surface heals. If we now exam-

ine the head, especially in a scantily-covered child's head, we find the skin rough, harsh and papular.

We may discontinue our ointment, and begin to wash the head every other night with Hebra's spiritus saponis kalinus, made by mixing two parts of *sapo viridis* of the B. P. with one of spiritus rectificatus, allowing the mixture to stand 24 hours, then filtering, and adding to the filtrate a little oil of lavender or other scent. A little of this should be poured on a flannel previously dipped into warm water and the flannel rubbed on the head until a smart lather be caused, care being taken that the liquid does not run into the eyes. The lather should be allowed to remain on the head some ten minutes or so, and then played off with warm water. This should be done at bedtime and in the morning some hair oil should be used, and the case will soon be well. Should this not occur, use a stimulating ointment, such as unguentum picis liquid in equal parts with unguentum zinci oleatis. This has the disadvantage of blackening the part, and a more elegant formula for an equally efficacious liniment is Saponis mollis; spiritus vini. rectificatus olei cadini aa $\frac{3}{4}$ i.; olei lavandulae 3 iss. A little of this should be rubbed on the part night and morning, and washed off before each fresh application. Exclusion of air is not now so necessary as when crusts are being formed, so that we may use the above. Lately I have been using, instead of the unguentum zinci oleatis, an ointment of 20 grains of gynocardic acid, to the ounce of vaseline. It is not better than the zinc ointment, but does relieve itching very markedly.

Before leaving the subject of head eczema I wish to refer to the well-known dependence of it upon the irritation caused by lice; they should always be sought for in a dirty subject, and will generally be found nearly always indeed where we get enlargement of the glands at the back of the neck, co-existing with a slight but very irritable eczema at the root of the hair behind. I know of no better means of destroying them than a head wash of equal parts of petroleum and olive oils. The nits will be best got rid of by washing with vinegar and the subsequent use of a tooth comb. Eczema of the non-hairy parts of the face must be treated on the general lines of eczema of the body, but is often tedious on account of the difficulty of applying remedies, either from peculiarities of shape or the objection of patients to anything unsightly.

When the hairy part of the face is affected, constituting the sycosis of many authors (I do not wish by this to insinuate there is no such disease as a sycosis caused by a parasite, though I am sure that such disease is rare), treatment is often very difficult; shaving is, I believe, inadmissible: for one reason it is painful, for another it keeps up daily a prejudicial irritation, and close cropping of the hair is equally effective for exposing the diseased spots, and permitting the application of remedies. Crop the hair then, and get to work by removing crusts; apply your ointment diligently.

I generally use in such cases an ointment of two parts of unguentum hydrarg. nitratis and six of saponis mollis. The skin is often deeply infiltrated, and this ointment tends to the removal of infiltrated matter; but I prefer, where patients will allow me to do so, to cover the part with Emplastrum Litharg. B. P. I am not aware if this is a common mode of practice, but in my hands it has proved very successful after other means have failed. I apply the plaster myself, and direct it to be kept on until it becomes loose. It must be removed with gentleness, of course, and, if necessary, replaced by others; it acts, I believe, partly by pressure, causing absorption of the exudation resulting from chronic congestion, and partly by the exclusion of air, while the part is kept warm and bathed by natural moisture.

In chronic eczema of the body, associated with exudation and formation of scales, for pustulation is not so common as on the head, our treatment must again be first directed to removal of any impediment to the direct application of remedies. Should the scales be thick and the exudation extensive we can get rid of both in a great measure by means of potassa fusa. Use a solution of it, which need rarely be more than half a drachm to an ounce of water, and should generally be tried in a much weaker form. Pass a brush dipped in it over affected part, backward and forward, and then rub it in well with a flannel dipped in warm water, until a lather is caused; continue this, and you will see the scales melt away, while the proceeding becomes after a time more and more painful. Discontinue the rubbing, and cover the place with rags dipped in cold water or a very weak acetate or lead lotion; continue the soothing applications, and repeat the use of potassa fusa in a few days. This treatment I have found very useful in gouty eczema of fingers. Generally speaking, however, scales are not formed in excess, and the skin is merely thickened, and has lost its suppleness. Where, as in the case of hands or feet, it is possible, I recommend the patient to wear a vulcanized india-rubber glove, by means of which the hand is kept warm and bathed in sweat, scales and exudation absorbed, and a cure often effected. It is in such cases especially that the actual ointment does not so much matter, only let it be well made. The chief use of the ointment is to make the skin moist, and supply the deficient suppleness and sweat which are lost, owing to the pressure of the exudation into the skin. Keep the ointment constantly applied, and avoid washing as much as possible. The unguentum liquidi is in these cases very useful by diminishing the itching, but may sometimes itself be very irritating, and I therefore, as a rule, give it in equal parts with the unguentum zinci oleatis.

It would be impossible for me in the limits of a brief paper to consider either all ointments, all lotions, or the treatment of eczema in every situation. My object has been to formulate, if possible, system of treatment founded on a due

conception of the pathology of the disease, and I will express in a few brief axioms my views of the disease and its treatment: 1. Eczema is a catarrh of the skin. 2. Its local manifestation may be erythema, a papule, pustule, or vesicle. 3. It may commence acutely, and tend then to spontaneous recovery, or chronicity. When chronic, not only are vesicles, etc., formed, but exudation takes place into the true skin. 5. Such exudation must be removed, which must be by absorption by the medium of the blood vessels. 6. Hard water must be always avoided in treatment. 7. In all acute conditions lotions do good; ointments do harm. 8. Air should be excluded. 9. Water used but little. 10. Crusts must be removed.—*Birmingham Med. Review.*

CELERY COMPOUND.

In a Report on Materia Medica and Therapeutics to the Southern Illinois Medical Association by Dr. James I. Hale, Anna, Illinois, appears the following paragraph which is extracted from the *Therapeutic Gazette*:

"*Apium Graveolens* (Celery Seed). To what extent this has been used as a medicine I do not know. I do not remember of having seen any literature on the subject, but I know a fluid extract has been prepared and placed on the market which I have neither seen nor tested. Remembering the peculiar soothing, semi-narcotic, and hypnotic effects onions, leeks, lettuce, celery, and allied substances have when freely eaten, and that they are recommended as a particularly suitable article of diet for nervous individuals, I was led to believe that they might be more fully utilized as medicines. Being frequently consulted in regard to young infants being restless and fretful, particularly at night, which most generally arises from slight flatulency and acidity of the stomach and bowels, I have for some time been in the habit of recommending infusion of Celery Seeds with a little soda administered almost ad libitum with the most gratifying results. I deem it much better than the more potent and harmful narcotics so frequently, and often recklessly given. It is astonishing what good babies can often be made of the most fretful and restless. If you have not already tried it, by all means do so, and my word for it the weary, anxious mother, as well the hitherto irate fathers, will arise and call you blessed."

For years past Messrs. Chapman, Green & Co., Grand Crossing, Chicago, Illinois, have manufactured and sold a Fluid Extract of Celery Seed, which gave satisfaction to all who used it. Latterly influenced by the request of many Physicians to put up a preparation which could be more easily prescribed than a Fluid Extract they devised the following compounds which I extract from their Price List:

GLYCEROLE OF CELERY COMPOUND: *Celery*

Seed, Catnip and German Chamomile.—Devised to supply a demand by the profession for a simple remedy that can be prescribed safely in cases of infantile derangements, dependent upon teething or otherwise, and where it is not thought desirable or necessary that morphia be given. The combination seems to control nearly all conditions of this class, and, in a majority of cases, is said to fill the indications better than opiates. It is a reliable nervine, inducing sleep, quieting pain, and promoting digestion. *It is also noticed that this Glycerole is an excellent medium for the exhibition of morphia.* Patients who owing to idiosyncrasy cannot well tolerate morphia or opium, find its use most unobjectionable if dissolved in this glycerole.

For infants the dose is 10 to 20 drops according to age or condition.—*Indiana Medical Reporter.*

TREATMENT OF GONORRHOEA BY INJECTIONS OF SULPHUROUS ACID DILUTED WITH WATER.

For some time I have treated all cases of gonorrhœa with injections of sulphurous acid diluted with water, and as the results in my hands have been very satisfactory, I write in the hope that others may be induced to give this method a trial.

I do not offer any theory on the subject, I simply state the fact that I have now treated sixteen cases of gonorrhœa, using no other medicine, and they all returned to duty in an average of six days. I have not observed a relapse or any bad effect. The majority of the cases were second attacks, but those suffering from primary attacks of the disease recovered equally fast.

When I commenced this method of treatment I used much stronger injections than I do at present. I find sulphurous acid one part to fifteen of water quite strong enough for most cases. The rules of treatment I recommend are: place the patient on low diet, and administer injections of sulphurous acid diluted in water one to fifteen, three times a day, no other treatment being necessary. I find it is necessary for the attendant to give the injections, for if it is done by the patient it is never well done, most of the fluid escaping back outside the nozzle of the syringe. The injection should be kept in the urethra from three to five minutes. If the patient complains of much pain, or if there is a tendency to chordee, it will then be sufficient to administer the injections once or twice in twenty-four hours.

If these instructions are strictly followed the purulent discharge will become scanty at the end of the first day, and on the third it will be replaced by a thin, gleet-like discharge, which also disappears in a couple of days. While this watery discharge lasts I usually administer only one injection daily. I find that the first injection frequently causes pain, which is not so much complained of afterwards.

I. therefore, in a few cases give the first injection very much diluted—one in twenty, afterwards using one in fifteen. It is necessary to see that the sulphurous acid is fresh and good before it is diluted to the required strength.—*W. D. Wilson, M.B., in London Lancet.*

ANTISEPTIC TREATMENT OF ABSCESS.

Dr. Lucas Championnière recommends in the *Union Médicale*, the following procedure:—

Before opening an abscess, in whatever region it may be placed, we should carefully wash the skin, especially if it has been covered by a poultice, with a strong carbolic acid solution:—

℞. Acidi carbolici	50 parts
Glycerini,	75 “
Aquæ,	1000 “ M.

The bistoury should also be dipped in the solution. The contents of the abscess are to be discharged, and some of the above solution injected, care being taken that the injected liquid has a free issue. The end of a caoutchouc tube is introduced into the wound, having a thread attached to it to facilitate its removal, and it is then covered by a thick layer of charpie impregnated with a solution of carbolic acid twenty-five parts, glycerine twenty-five parts, and water one thousand parts. Finally, over all is laid a layer of gummed silk. At the end of twenty-four hours the tube is removed in order that it may be cleansed and shortened, when it is again covered with the charpie moistened with the weaker solution. Under this treatment the amount of suppuration is diminished, the redness of the wound becomes insignificant, and the cicatrices which result are much less apparent. Dr. Lucas recommends this procedure especially in abscess of the breast.

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DR. BUCKNILL ON GUITEAU.

In the July number of *Brain*, Dr. Charles Bucknill gives a lengthy review of the Guiteau case, affirming the sanity and responsibility of the

assassin, and criticising severely the opinions of Drs. Hammond, Folsom, Channing, &c. A few extracts may be of interest:—"Dr. Hammond argued that there is no necessary connection between medical insanity and legal insanity: if by this he means that medical insanity includes far more than legal insanity, I entirely agree with him, for, strictly speaking, every deviation from the standard of mental health produced by disease is a state of medical insanity. That is to say, it is a symptom of disease which the physician may be called upon to give advice about, or to treat by appropriate remedies, but which might afford no justification for any legal proceedings whatsoever. It may be right or wrong for the lawyers to draw the line through the field of insanity where they have drawn it, and to grant that all on one side thereof shall exonerate a man from responsibility, while on the other side thereof a man shall be liable to punishment. But it would seem that for the practical purposes of the rough justice with which mankind must be satisfied, it is necessary a line must be drawn somewhere, for it is impossible to exonerate from punishment all criminals who deviate from the normal conditions of sane and reasonable men. Indeed if morality is natural we must admit that no such criminals can exist, since, as a matter of fact, we can find no criminals who are not mentally in disaccord with existing circumstances. That the rules of law should be so elastic and fluctuating as to adapt themselves to all anomalies of character, is impossible, while man's knowledge is so dim and his powers so imperfect that he cannot inflict the same punishment for the same offences upon apparently healthy criminals without the grossest inequality of suffering. It follows from these considerations that all the discussion which has raged with regard to the punishment of insane offenders has had its origin in the persistent attempt to review and amend legal rules according to medical principles, or, as I have long ago pointed out, from the fallacy of regarding something definite, that is to say legal insanity, as if it were insanity in general, which is the old fallacy of changing the *argumentum de dicto secundum quid, ad dictum simpliciter.*"

Dr. Bucknill then discusses the question of Guiteau's medical sanity or insanity, and points out how the advocates of the insanity theory contradict themselves and one another. He finds in Guiteau neither mania, insane delusion, moral

affection or impulsive insanity, nor a slowly progressing form of general paralysis of the insane. He denounces the readiness with which *hereditary predisposition* is dragged into court as presumptive evidence of insanity. He says: "I must however add that, in my own opinion, the argument in favor of insanity founded upon the supposed transmission of an hereditary tendency to mental disease has of late been used in most absurd and unjustifiable excess, and I do not know that the interests of justice would be damaged if it were to be excluded altogether in judicial inquiries; for if it could be clearly shown that both a man's parents, and all four of his grandparents, and all his uncles and aunts had been unquestionably insane, it would afford no proof whatever that the man himself had been insane. Such evidence would at most strengthen the presumption that he had been so under circumstances which would otherwise be more doubtful. Such evidence can never be a satisfactory substitute for more direct evidence as to the issue, and the small worth it possesses must at once be felt when we consider that only a moderate proportion of the children of insane forefathers ever do become insane." In concluding his very interesting and well-written article Dr. Bucknill discusses the inspiration theory as follows: "It is surprising that the influence of this curious sect or community, the perfectionists of Oneida, was made so little of at the trial, either by the prosecution or by the defence. Probably it was felt to be a double-edged argument, dangerous to handle. It would be difficult however, to over-estimate this influence, and probably it would not be too much to say that the assassination of President Garfield was the outcome of Oneida, for we must not forget that Guiteau's father was an enthusiastic believer in the doctrines of Father Noyes, and diligently impressed them upon his son, indeed upon his sons, for Guiteau's brother expounded in Court the Creed, which sounds so strange in modern ears, of the real battle between God and the devil, and the part we take in it. 'That was my father's, theological view, it was my brother's, it is mine.' When Guiteau actually entered the community he must necessarily have believed in the main doctrine of his co-religionists, that all actions are divinely inspired by God or by the devil; and after he left the community it is plain from his letters and papers that he retained and acted upon that belief. It was by divine inspiration

that he believed himself destined to establish a great theocratic newspaper. If he had been attacked by bodily disease he would have trusted to the faith cure, as it is used at Oneida, that is to say, its cure by the direct personal intervention of God in answer to prayer. And it is unreasonable to suppose that in the most grave and serious action beyond all comparison in his life, he would cease to entertain his most habitual thought. But was this belief an insane delusion? If so, all the world is mad outside each man's little circle of fellow-believers. The inconsistency involved in the belief that God can inspire a wicked act does not make the belief an insane one, for we know that the devil can quote scripture to his purpose, and that more devilment has been done in God's name than in any other. That the belief was not a delusion is evident from the fact that it was derived from the teaching of others; that it was not the result of disease; and that Guiteau attempted to make others believe that it was a delusion as an excuse for his crime, which no one under the insane delusion of inspiration would have done. It was a sane belief, probably as sincere as many other religious beliefs; a belief which may do good or evil in the world, as it is entertained and acted upon, with purposes more or less consistent, by good or by wicked men. The answer when such a belief is urged as an excuse for crime, is that other men may entertain and act upon it more consistently than the criminal. The judge and jury may say, we also believe in the inspiration of the Almighty, and we have prayed to Him that He will enable us to give a just judgment upon you, and our judgment inspired by Him who is the source of all justice, is that you are guilty, as indicated, and that you must suffer the penalty of your crime."

This excellent article of Dr. Bucknill's will prove an antidote to much of the sentimental bosh which has lately appeared on this subject.

AMPUTATION IN SENILE GANGRENE.

Most surgical authorities condemn amputation in cases of senile gangrene. Mr. Dobson of Bristol has recently reported in the *British Medical Journal* two cases in which amputation was successfully performed for the cure of spreading senile gangrene. In the first case, the patient was a farm laborer, sixty-two years of age, thin, shrunken and feeble, with a weak heart and

atheromatous arteries. The gangrene had spread from the toes to about three inches above the left ankle; pulsation could not be felt in the anterior or posterior tibial, or in the popliteal, though pulsation could be traced in the femoral to the bottom of Hunter's Canal. Before the operation the patient was in a low, muttering delirium, unconscious, and apparently moribund, with diarrhoea, an irregular pulse, and an evening temperature of 103° . Mr. Dobson administered ether, and amputated the thigh at the lower third antiseptically. The delirium disappeared on the second day, and convalescence was uninterrupted. On the seventeenth day the patient was allowed up.

In the second case Mr. Lansdown amputated below the knee upon an old broken-down albuminuric man of seventy-two, who was suffering from rapidly-spreading senile gangrene. The stump healed quickly, and the success of the operation was perfect. Mr. Dobson believes that when clots have formed in both arteries and veins the sphacelated portion becomes a source of infection, and the patient is poisoned by his own decomposing tissues. By amputation the surgeon removes the source of infection, and frequently saves his patient. Mr. Dobson quotes Charcot in support of his view:—"It cannot be doubted that putrid substances from sphacelated parts may themselves penetrate into the circulating current," having frequently observed this in cases of spontaneous gangrene, the result of atheromatous obliteration of the chief arterial trunks.

Mr. Dobson insists upon the use of the antiseptic method in these cases, believing that it sometimes turns the scale in favor of the patient by preventing suppuration, and thus sparing the enfeebled nutritive powers. He does not advocate amputation as a routine treatment in all cases of spreading senile gangrene, but considers great discrimination necessary in the selection of suitable cases for operation. He formulates his views as follows:—

"1. I would not amputate in those cases where the patient's strength was fairly good, where there was a fair prospect that a line of demarcation would be formed, where he was not suffering great pain, or where the pain was readily controlled by small doses of opium, and when symptoms of septic absorption were absent.

2. I would advise amputation in all those cases where the patient was not extremely aged, *i.e.*,

over seventy-five or seventy-six, in which the pain was very severe, the gangrene rapidly spreading, and in which marked symptoms of putrid poisoning were manifesting themselves; and I would amputate, irrespectively of the patency or otherwise of the main artery at the spot selected for amputation, preferring, of course, patency.

3. In cases of amputation under such conditions as I have mentioned I would amputate above the knee for gangrene of the leg, above the elbow for gangrene of the hand or forearm. Even when the main artery is blocked, the collateral circulation is generally sufficient to carry on the nutrition of a comparatively short stump. This is my reason for a comparatively high amputation. The mere possibility of the rapid healing of a large stump in even very old persons is a sufficiently well-established fact in surgery to need no comment. The point I would further insist on is that, with antiseptic precautions, there is usually a minimum stress laid upon the powers of repair, which is specially useful in dealing with such cases as those we are now considering."

TREATMENT OF CHOREA.

In the August number of the *New York Medical Journal and Obstetrical Review*, Dr. A. D. Rockwell publishes a case of post paralytic chorea cured by the application of ether spray to the spine, the internal administration of conium, and central galvanization. The cure was effected in ten weeks, although the case was severe and of a year's duration. He does not place much reliance upon the ether spray in the treatment of chorea; cases seem to do as well without it as with it. He has obtained better results with conium than with any other drug, especially in the chronic form of the disease—He begins with five drop doses of the fluid extract three times daily, adding a drop each day till he reaches twenty or twenty-five drops. He believes much good may be obtained from the judicious use of electricity: failure usually results from its incomplete application or lack of persistence in the treatment. Localized applications do not, as a rule, command success in chorea: general faradization and central galvanization, carried out with care and precision, are essential.

REVIEWS.

A Practical Treatise on Diseases of the Skin. By LOUIS A. DUHRING, M.D. Third Edition. Philadelphia: J. B. Lippincott & Co. Montreal: Dawson Brothers.

Dr. Duhring's book is so well-known that it does not now require an extended notice. In its third edition it gives evidence of careful revision; many portions have been re-written, notably the chapter on the anatomy and physiology of the skin, and the whole has been brought well up to date. The publishers have done their part well; altogether it is one of the most attractive and readable books on dermatology extant.

The Sympathetic Diseases of the Eye. By LUDWIG MAUTHNER, M.D. Translated from the German by Warren Webster, M.D., and James A. Spaulding, M.D. New York: Wm. Wood & Co.

This little book, by a well-known Vienna Specialist, is the first of a series of monographs intended to cover the whole field of ophthalmology. The author professes to compile for the oculist the widely diverse opinions on subjects under discussion, and at the same time afford the general practitioner an insight into the pathology and treatment of the more important diseases of the Eye. The subject is treated in five sections, Anatomy, Etiology, Pathology, Pathogeny, and Therapeutics. The book is well got up, but the translation is too bald and literal to make pleasant reading.

Lectures on Electricity in its relation to Medicine and Surgery. By A. D. Rockwell, A. M., M.D. New York: Wm. Wood & Co.

In a series of eight lectures, the author discusses the chief practical points connected with the application of Dynamic and Franklinic Electricity to Medicine and Surgery. The subjects of his Lectures are Electro-physics, Electro-physiology, Electro-diagnosis, Methods of Application, Franklinic or Static Electricity, Electro-dynamic apparatus, Treatment of Special diseases, and Electro-Surgery. In about 110 pages Dr. Rockwell compresses a great deal of useful information. This is the second edition, the first having been rapidly exhausted.

The Incidental Effects of Drugs—A Pharmacological and Clinical Handbook. By Dr. L. LEWIN, of BERLIN. Translated by W. T. Alexander, M.D. New York: Wm. Wood & Co.

Who has not occasionally obtained most unexpected results from drugs, sometimes favorable, sometimes unfavorable, and sometimes most alarming?

The individual facts and observations illustrating abnormal drug-action are widely scattered throughout medical literature in many languages. Dr. Lewin has devoted much time and labor to the collection and arrangement of these facts, and has succeeded in making a book of reference which will be valuable as a companion, or rather a supplement to our text-books on *Materia Medica* and *Therapeutics*. The general style and appearance of the book is highly creditable to the publishers.

A Clinical Handbook on the Diseases of Women. By W. SYMINGTON BROWN, M.D. New York: Wm. Wood & Co.

The author does not put this book forward as a treatise, but as a "practical guide on most of the diseases peculiar to women for the use of medical students and country practitioners." Neither the necessity nor the utility of a book like this is apparent. It cannot assist the student or the country practitioner, and it certainly will not increase Dr. Brown's reputation either as a gynecologist or as an author.

MORTALITY OF MONTREAL FOR JULY.

Males.....	267
Females.....	251
Total	518
As compared with 372 for June.	
Still-births	12
Mortality under 5 years of age.....	362
Deaths from Zymotic diseases were as follows:	
Small-pox.....	0
Measles ..	0
Scarlatina.....	0
Diphtheria	7
Croup	2
Pertussis	4
Typhoid Fever.....	12
Other Fevers.....	6
Dysentery	8
Diarrhoea.....	112
Cholera Infantum..	63
Other Zymotic diseases	3

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Measles and Scarlet Fever have declined; Typhoid Fever remains the same; Diphtheria has reappeared, and the Diarrhoeal diseases are very prevalent and fatal.

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Original Communications.

THE PRACTICE OF MEDICINE IN CHINA.

By WM. YOUNG, C.M., M.D., late of Hong Kong, China.

The practice of medicine is more or less empirical, that is, founded upon experience. We might, therefore, reasonably expect many substantial additions to our means of combating disease from the accumulated experiences of ages, recorded in Chinese books. To say that any one coming to China with such expectations would be disappointed, is putting the case very mildly; we would rather say, he will turn from the study with pity or contempt, if not with loathing and disgust.

Did we not know it to be true, it would surpass belief, that the physicians of a nation so old, so distinguished for her literary men, and so practical in some departments, should receive with unquestioning submission the falsehoods of their predecessors, and that so many ages have rolled away without the most distant approach to truth in the systems taught concerning the structure and functions of the human body. In any of the book stores in China, a diagram issued by the authority of the Imperial College at Peking can be bought, which gives an outline of what is known and taught in China regarding the anatomy

of the human body. In this diagram the œsophagus is rightly made to enter the stomach. The trachea goes through the lungs into the heart, and three tubes, passing posteriorly from the heart, connect it with the spleen, the liver, and kidneys. The kidneys are shown to be connected with the spinal column, and from them originates a subtle influence, which passes upward into the brain, and downward to the spermatic cords. The kidneys have thus a place of the first importance in the animal economy, as the Chinese locate between them the Ming Mûn or gate of life. These notions be it remembered are not the aberrations of irresponsible pretenders, but the undisputed teachings of the Imperial College, handed down without questioning through many generations, carrying with them the authority of deified sages, and having all the sanctity which religion and antiquity can give. In successfully dealing with a machine, the mechanic must be familiar with the structure of its parts, and the action of the whole when put together. But in China we have the human body, the most wonderful and complicated machine in existence, treated by ignorant quacks, who, taking advantage of the self-renovating powers of the human body, assume to heal its maladies, correct its irregularities, and make it work harmoniously. It is quite unnecessary to add that surgery as an art has no existence amongst the Chinese. Nature must effect her cures unaided by science, and her efforts in

this direction are often thwarted, or totally obstructed, by the most ignorant and unwarrantable interference with her functions, the simplest appliance in the department of surgery being quite unknown. The Chinese, however, are beginning to appreciate the skill of Western surgeons, as they come from all parts of the country to the many hospitals which have been established by missionaries and by the enterprise of the physicians attached to the European department of the Chinese Customs service. It is one of the hopeful signs of China to see the readiness with which they consult foreign surgeons, and to note the wonder at the result, and the respect inspired by their skill and attention. No one would ever forget the look of alarm and abject fear with which a Chinaman surveys the approach of a knife to an abscess, and how that look changes into one of unbounded pleasure and implicit trust, as the matter wells out of the opening. These labors are doing much and will yet do more to break down the barriers of prejudice and seclusion which have been reared by centuries.

That surgery was practiced amongst them at a remote period admits of no manner of doubt, as many allusions are made to the art, in some of their old books, and according to M. Stanislaus Julien it appears as far back as the third century of our era, the Chinese were in possession of an anæsthetic agent, which they employed in the same manner as we use chloroform and ether for producing insensibility during operations. M. Julien discovered a description of this in a work called "Kow-King-i-tong," In a biographical notice of Hoa-tho, who flourished under the dynasty of Wei, between the years 220 and 230 of our era. It is stated that he gave the sick a preparation of Ma-yo, who in a few minutes became as insensible as one plunged in drunkenness or deprived of life. He then made incisions, etc. After a number of days the patient found himself restored, without having experienced during the operation the slightest pain. It appears from the biography of Hoa that this Ma-yo was prepared by boiling and distillation. This, like the art of which it was the handmaid, is entirely lost, and Chinamen wondered as much as foreigners to find that in the forgotten past they possessed what is now prized by surgeons as the greatest triumphs of chemical skill, and by many a suffering patient as the greatest blessing of the healing art. At the corners of the streets in any Chinese city may be

witnessed the native dentist extracting teeth by what is said to be a painless method. The patient is made to sit down, a white powder (Hg Cl_2) is rubbed on the gum, the patient is then directed to wait a little; after a few minutes the process is repeated, and the dentist then introducing his thumb and fore-finger, with apparently very little violence the tooth is pulled out. I have never been able to trace whether any deleterious effects were produced by the action of the mercury on the jaw, or to learn what was its specific action on the gum, further than to notice that after the first rubbing it assumed a blanched appearance. The patients all winced under the operation, but it seemed harmless compared with the anguish-inflicting forceps or key.

The Chinese physician largely practices counter irritation. A favorite method which is commonly adopted in rheumatism and inflammatory pains is for the doctor to close his fist firmly, and using the index and middle fingers as forceps, to seize the skin over the part, draw it forcibly outwards, letting it free with a snap into its place. It is quite common to see coolies, that is the working classes (whose bodies are usually uncovered), with long, dark, bruised lines on their persons caused by this barbarous system of torture. A more painful though not so common method is the application of moxa, often causing large and gangrenous wounds by the application of fire near important and sensitive organs. But the favorite application to all parts is an adhesive plaster. It is a matter of sublime indifference to a Chinese practitioner whether the patient is suffering from an abscess or a wound, an abrasion, or merely a numbness from cold, the same plaster is applied. It matters not whether the wound be recent or of long standing, or whether it be clean or foul with corruption, the same disgusting materials are applied. If in spite of such treatment a cure is effected the praise of the remedy is vaunted abroad, but if, and what is usually the case, bad becomes worse, they assume that some evil influence has been at work to counteract the efficacy of the drug.

The fact that the blood circulated through the body seems to have been known to the Chinese in ancient times. But no true notion of arteries and veins as distributing and returning the blood has ever been developed. They supposed that both air and blood permeated the body in tubes, which have only an imaginary existence.

The study of the pulse has been a favorite one

for the Chinese physician in all ages. It is marvellous with what eyes a Chinese doctor can look into his patient through the pulse; he can not only tell the disease, the exact seat, but even decide the age and sex of the undeveloped foetus. Western physicians are often placed at a discount among the Chinese on account of their supposed ignorance in not being able to diagnose a case from merely feeling the pulse of a patient, sometimes they are not even allowed to see the sufferer, a hand merely being thrust out between curtains, and often the most misleading answers are given to simple questions, the more certain to test the skill or puzzle the ingenuity of the doctor. The Chinese physician sublimely soars above all such difficulties, and finds in the realms of imagination easy solutions, which, if they do not lead him to cure the patient, shamefully imposes on the innocent and unsuspecting. The Chinese have accomplished this blissful and wonderful state by the invention of the theory of the Yin and Yang, which in their speculations are two principles or powers in nature, the male and female, ever active in producing the physical, chemical and vital phenomena which occur within and around us. Not only are all the obscure phenomena of inorganic change accounted for by the action and reaction of those powers, but the occult powers of living bodies in all the complicated action of their organs in health and disease are explained by calling in the aid of these imaginary principles. When these are equalized there is health; when the male principle is in the ascendant there is disease, and it is of an inflammatory type. If the female principle predominates the disease is of a low or typhoid character. The reaction of these principles make up an amount of absurdity truly wonderful, but venerable for its antiquity. Most of the medicines in use among the Chinese are absolutely inert, and to some of which such virtues are attached as to be sold for many times their weight in silver. The native Gensing, though entirely rejected in western medicine, is very highly prized amongst the Chinese, so much so that it enters as an essential ingredient into numerous native preparations. The high value attached to it, is because its roots bear a real or fanciful resemblance to the form of the human body. The same fanciful relations guide them in the application of all medicines to the cure of disease, for medicines are never applied by them according to their known therapeutical properties, but according to some

supposed relationship between the organs of the body on the one hand, and the elements, earth, wood, metal, water and fire, on the other. Thus they fancy that the liver is related to the element wood, and as metal has control over wood, medicines related to the element metal are those which for this reason are applicable to the cure of diseases of the liver; so with regard to all their medicines and all the organs of the body. A round of imaginary relationships is established, the actual virtues of the medicines are overlooked, active and inert substances are employed with the same confidence, thus exhibiting an amount of ignorance and absurdity in dealing with the lives and health of men which is absolutely inconceivable.

But one of the most melancholy chapters of Chinese medicine is the superstitious and idolatrous practices connected with guarding the sick from the destructive spirit of disease. This is accomplished by various incantations, and by the exhibition on the bed and walls of the room, of hideous pictures to frighten away the genii of evil. Sometimes the patient's face is painted in the most grotesque manner, in fantastic shapes and colors, giving the whole scene, were not the life or health of the patient at stake, a most ludicrous aspect.

The choice of a physician is also decided by lot and not from any well-known skill or ability of the doctor, or if the patient or friends decided upon a certain practitioner, they endeavor to find evidence that their selection has been fortunate. The Chinese are, however, in all these matters thoroughly practical. The physician undertakes to cure for so much and within a certain time, and should the first dose of the medicine not produce the desired effect, the oracle is again consulted and another physician is again called in. The moment, however, a Chinese doctor perceives that the patient is sinking he at once abandons the case, leaving the poor sufferer to linger without aid, or do anything to smooth the way of the last and closing scene. This moment is the opportunity of Western Physicians, often, however, too late to be of any use to the sufferer. The Chinese have a thorough contempt for their doctors unless they are certain he is doing them good, or he succeeds in gaining their implicit confidence by bold and reckless assertion. His nostrums are invariably looked upon with suspicion, for even in the much vaunted Tung Wah Hospital of Hong Kong,

which is under the management of native doctors, on a settle behind the building may be seen ranged under the name of the patient, or number of his bed duplicates of the medicine given, or the exhausted matrix of decoctions, so that, should the patient die with symptoms not understood, the medicine or detritus may be examined, to see that it contained no deleterious or poisonous ingredients.

Happily for the Chinese nearly all their medicines are inert—as pearls, tiger's bones, rhinoceros horns, fossil bones and numerous other articles as inert are used, which are absolutely without any medicinal virtue. Were it otherwise it would require no gift of prophecy to predict that the whole land would soon be a graveyard, and its teeming cities would be turned into desolation. Of obstetrics as a science they are entirely ignorant, wearying and exhausting the patient by absurd and ridiculous positions, often risking the mother's life by giving her disgusting draughts, and at last abandoning the case, rendering many a home desolate or marring the maternal prospects, when the most elementary knowledge of the subject would have overcome all difficulties and saved the life of one or both. In this department also prejudice is fast breaking down, and in cases of difficulty a European surgeon will be sent for. It is then, when they see how simply, and without exposure, the case is dealt with that their admiration for the foreign doctor is shown, and they make no scruple to speak of their own in terms far from complimentary.

Incredible as it may seem, this state of matters has existed for ages, and considering the state of personal filth and the unhygienic conditions in which they live, so far as can be gathered from their own authorities or from personal observation, the rates of mortality in China will bear favorable comparison with Western nations.

This in a great measure is to be accounted for by the simple manner in which they live, their diet being chiefly vegetable combined with fats, the absence of spirituous liquors, and their places of business having only three walls, the fourth side being only a temporary structure, which can be taken away or replaced at pleasure.

It has often been remarked by European practitioners the absence of acute inflammatory diseases amongst the Chinese, and many profound speculations have been offered to account for this fact, many attributing it to their mode of living, their

abstemious habits, their vegetable diet carefully prepared, and to their never drinking cold liquids, all their drink being tea, the national beverage, freshly made and carefully decanted. Perhaps the whole of these, added to their sanguine temperament, renders them almost free from those acute inflammatory disorders which swell the rate of mortality in Western cities.

The principal diseases from which they suffer are intermittent and remittent fevers, congestions of liver and spleen, chronic rheumatism—their cities are never entirely free from small-pox. Skin diseases may be studied at the corner of every street, and few homes are without the necessity of employing an oculist. Vesical calculi are very common. Elephantiasis Arabum is found in some districts, and leprosy is sometimes met with. That the minds of men whose calling is to relieve sufferings so great and diseases so formidable should have been satisfied to grope so long in darkness is indeed wonderful. Age after age the process of the deception has gone on, one generation after another has followed in the abyss of mental delusion, and never yet has there been found a mind among all the myriads of physicians which could break through the trammels of venerable ignorance, in order to strike out a new path towards scientific and rational medicine as it has been developed by the labors of physicians in the West. Why is this? The answer is to be found in the teaching of their religion, and in the prejudices of the literati or governing classes against the innovations of foreigners. Their religion may be briefly defined as ancestral worship. A Chinaman can never be wiser or better than his forefathers, and it is wickedness and presumption for him to improve on their methods or alter their decisions; and when he is asked why he does such a thing, or does it in such a way he will not show that it is the best way in which the thing could be done, but will at once find refuge in their oft-repeated phrase "old custom." To introduce new ways would be for him irreverence, and new modes of thought high treason to the dead. The teachings of the literati have also engendered amongst the Chinese an intense horror of touching a corpse and a great reverence for the person of the dead. He believes as he is buried so he exists in the spirit world, and to mutilate the body, or even desecrate the grave, is to disturb all the sacred relationships that exist between the world of spirits and this mundane sphere. The body if defaced the

spirit knows no rest. This doctrine has a firm hold on the minds of the people, and by it the literati maintain a cruel tyranny over the minds of their degraded fellow countrymen. It has also been the means of excluding from the country railways and telegraphs, as the noise of the one and the wires of the other would disturb the *fung shuey* or repose of the dead. Two years ago, at the provincial examination held in Canton, most of the candidates from a certain district of the city failed to pass; their failure was attributed to the presence of the spires of the Roman Catholic Cathedral, which disturbed the *fung shuey*. This was the cause of a serious riot, the presence of an imposing military force being necessary to save the building from destruction. Need it be wondered, then, that the study of Anatomy, which is the basis of any rational system of medicine, is altogether unknown, and the poor Chinaman continues to have his ailments treated by ignorant pretenders, who, shielding themselves behind superstitious and idolatrous customs, attribute their failures to the preponderating principle of evil. But however dark this picture may seem, rifts in the gloom are constantly appearing, clearly showing that the Chinese are beginning to appreciate and realize the fact that a better system of medicine than their own is understood and practiced by the hated barbarians, and many tempted by avarice and the national love of learning are travelling to other lands, attending foreign universities, even obtaining degrees, who when returning to their native land will sow precious seeds of thought, which falling into verdant soil, will yet germinate in improved modes of teaching, and a more just, because a more correct, system of medicine, founded upon research and patient investigation, instead of the vagaries of diseased imaginations, thus bringing untold blessings to that benighted and downtrodden people.

Montreal, 17th August, 1882.

VITAL STATISTICS.*

By W. B. CARPENTER, M.A., LL.D., F.R.S.

Owing to the peculiar circumstances of Canada, its great extent of territory, its numerous provinces and its scattered population, the problem of vital statistics is somewhat difficult. The best

* Abstract of Address delivered at Toronto before the Canada Medical Association, Sept. 6, 1882.

results would be obtained from a uniform system of registering vital statistics, carried out at first in the great centres of population only. A uniform system enforced by the authority of the Dominion Government would be far more valuable than separate provincial systems carried out by local legislation, whose variations would seriously diminish their value. England, Scotland and Ireland possess a perfectly uniform system, thanks to the untiring efforts of Dr. Farr, whose services to vital statistics can hardly be overestimated. Although to him we owe the term *zymotic*, the principle of *zymosis* was long ago enunciated. In a work on the Diseases of the Army, by Sir John Pringle, published some 140 years ago, the following important principles are laid down:—

1. That certain diseases are due to a species of fermentation of the blood produced by ferments introduced into it.
2. That certain forms of *zymotic* disease may be converted into other forms, which are usually regarded as of different type. In other words, certain *zymotic* diseases are convertible the one into the other.

Sir John states that in 1743 a number of soldiers, some of whom were suffering from the mild autumnal remittent fever of the country, were shipped from the Low Countries to Scotland in little brigs at the end of the season. The voyage occupied six weeks, and the sea was so rough that the men had to be kept under hatches the greater part of the time. The result of the foul air and overcrowding was that the type of fever entirely changed, and the mild autumnal remittent became a malignant typhus, which spread rapidly through the seaport towns where the sick soldiers disembarked.

A very striking case came under personal observation. The *Eclair*, a troop-ship serving on the west coast of Africa, was ordered home to England. Many of the men on board were suffering from the malarial fever of the country. There was a good deal of foul bilge water in the vessel with decaying vegetable matter, and the result was that the simple malarial fever developed into true yellow fever. When the vessel touched at the Cape Verde Islands, the yellow fever, which had hitherto been unknown in the islands, broke out among the inhabitants, and raged with such intensity that the Portuguese Government applied to the British Government for compensation.

It is my own belief, supported by the authority

of Sydenham, McWilliam, Christison and many others, that the media in which germs are developed have a most important effect upon the character of fever produced. Germs which under ordinary circumstances would produce malarial fever, produce a more malignant type of disease when developed in blood rendered unhealthy by bad ventilation or other causes. There is a wide range of variation in natural history quite irrespective of Darwin's views. Sharply marked classifications and distinctions may hold good for some times and some places, but not for all times and all places.

A fact of great importance has been clearly demonstrated by Dr. Farr's system of vital statistics. When different towns or different country districts are compared with each other, or when town districts are compared with country districts, it is found that the rate of mortality from *non-zymotic* disease is practically the same in town and country. The amount of *non-zymotic* disease is a tolerably uniform quantity all over, and the doubling or even trebling of the death rate which occurs in some of the worst town districts is entirely attributable to *zymotic* disease. When sanitary reformers got hold of this great fact, that a large or small death rate in any community practically depends upon the amount of preventable *zymotic* disease which exists in that community, they impressed it strongly upon the Government to secure sanitary reforms. But the great obstacle which had to be encountered in England, and which will no doubt have to be encountered in Canada, was the want of a strong public opinion. Governments generally strive to carry out the wishes of the people as far as possible; no Government can carry out a scheme of sanitary reform in the face of an unwilling people, nor would the Government dare to refuse such reforms if demanded by the people. In Montreal, when compulsory vaccination was attempted to stamp out small-pox, it was found impossible to force it upon the people owing to the strong prejudice against it among certain sections of the community. Medical men especially should be fully impressed with the necessity of creating a healthy public opinion on sanitary matters. In England, public opinion is now decidedly in favor of the promotion of these objects; and I do not hesitate to say that the dread of the loss of the Prince of Wales' life has had more to do with this change of public opinion than any other single event. There is now com-

paratively little difficulty in carrying forward any plan of sanitary improvement which is well considered, and obviously for the public benefit.

I would take this opportunity of saying something about small-pox and vaccination, a subject in which I am most interested, and to which I have recently devoted considerable attention. The epidemic of small-pox which swept over Europe and America in 1871, and subsequently, was remarkable from the fact that its type (malignant purpuric) had not been seen in Europe since the middle of last century. As the result of my investigations, I am led to attribute the sudden reappearance of this malignant form to the overcrowding of the French army in Paris during the siege, and the confinement in unhealthy quarters of the French prisoners taken by the Germans. The mild type of small-pox which existed around Paris was developed by unsanitary conditions into the malignant variety, which spread with amazing rapidity throughout Europe and America, and was very destructive of human life. It has been proved beyond doubt, that thorough vaccination and proper sanitary measures are the best possible means of protection against a malignant type of small-pox. No child that has been properly vaccinated has ever been afflicted with anything more severe than the milder type of the disease. A matter of great importance, however, is the use of pure vaccine. Vaccine virus undoubtedly deteriorates after long-continued transmission through the human body, and then has less protective power against small-pox. The use of animal vaccine in all cases is safer and better. In modern times no better example of the protective power of vaccination can be found than the case of San Francisco. When small-pox broke out in the filthy overcrowded Chinese quarter, the people became thoroughly alarmed. Prompt measures were at once adopted, and all the school children, 60,000 in number, were vaccinated. The disease was confined to the Chinese, none of whom would submit to vaccination; in the other parts of the city the only cases which occurred were among adults who had neglected to be re-vaccinated, the children entirely escaped.

Dr. Carpenter then referred to the cholera epidemic of 1849. In Baltimore, the authorities took great pains to put the city in a good sanitary condition, and the cholera passed them by. But in the Baltimore poor-house, situated outside of the city, there was a dreadful outbreak, 40 or 50 cases a

day out of a population of 800. The place had been thoroughly cleaned and whitewashed, there was no overcrowding, and the drainage was thought to be good. On investigation it was found that behind the walls was a marsh covered with rank grass into which the sewage was discharged. The marsh was drained and disinfected, and the cholera immediately ceased.

Progress of Medical Science.

ON INFANTILE DIARRHEA.

By DOUGLAS MORTON, A.M., M.D.*

***** The fact that such drugs as opium and the vegetable astringents are this day given indiscriminately, without regard to the stage of the disease or condition of the patient; and that beef tea is highly recommended by some as a food, and water given sparingly by others, constitute sufficient proof that this already much-discussed subject may yet undergo profitable discussion.

Some authors have, I think, unnecessarily complicated the subject by discussing the different degrees of severity of the disease and its distinct stages in distinct chapters and under distinct heads. The terms summer diarrhea and cholera infantum mean pathologically the same thing. The latter simply represents a severe type of the former, and entero-colitis is merely a stage of either.

The idea of all others that should never be lost sight of in the treatment of any stage of the disease is that failure of digestion, however brought about, is an essential factor. This point I wish to make emphatic, for I do not believe that any one duly impressed with the truth of it will ever prescribe opium or tannin in any of its forms in the early stage.

In an analysis of the post-mortem appearance in eighty-two cases of intestinal inflammation in children Dr. J. Lewis Smith found the upper part of the small intestine inflamed in only twelve cases, the ilium in forty-nine cases, and the colon in eighty-one out of the eighty-two cases. The inferences obviously to be drawn from Dr. Smith's analysis are these: That food having passed the pylorus undigested acts as an irritant on the intestinal canal, and that as it passes on it undergoes decomposition, giving rise to products more and more irritant the further it goes until it gets to the colon, which is the seat of lesion in every case which reaches the inflammatory stage.

To treat this disease successfully an intelligent idea on its causation is indispensable, for in few

diseases are their causes more susceptible of removal, or at least of restraint, than in this.

At all seasons of the year children live under bad hygienic conditions, cut teeth, and eat indigestible food; but it is only in the hottest part of the summer that they are peculiarly subject to diseases of the alimentary canal. In cities where these diseases prevail about one hundred times as many children die of them in July as in January. As a factor in causation heat is therefore of paramount importance. Upon the other hand it must not be forgotten that among children who do not happen to cut teeth in the hottest months, and who get their food from their mothers' breast, the mortality is comparatively small—a fact going to show the importance also of dentition and improper food as causes.

The most satisfactory explanation of the action of heat in causing infantile diarrhea is that based upon a relation existing between the skin, or rather its nerve terminals, and the vasomotor centers which control the visceral blood-supply, in accordance with which the tone of the arterioles is maintained by the tonic effect of cold air, and depressed, on the other hand, by long continued heat.* This depression by heat places the vascular caliber in what may be called a state of unstable equilibrium, which is readily destroyed by the ingestion of difficultly-digested food, especially so if the irritation connected with teething is superadded. The congestion following may vary from a degree sufficient simply to bring about a mild diarrhea to that severe enough to cause the gravest cholera infantum.

Since heat plays so important a part in the production of infantile diarrhea, our first step in treatment must be to meet its effects as directly as possible. Its immediate effects are loss of tone of the muscular coats of the visceral arterioles, and their consequent dilatation. In most cases the application of cold will be our most efficient remedy, not as an antipyretic so much as a vasomotor stimulant. Cold suddenly applied to the body of a woman with postpartum hemorrhage will excite the flaccid womb and cause it to contract. We know the same effect is produced on unstriated muscle throughout the body. This idea should guide us in our mode of application of cold. The child should be subjected to frequent bathings in water of lower temperature than that of the body. But since it is possible to produce too great a shock, the water should at first be only a few degrees lower, and gradually cooled down during the progress of the bath. To prevent recurrence of vasomotor depression the patient should be kept comfortably cool during the intervals between the

*Read before the Louisville Medico-Chirurgical Society, September 2, 1881.

* It is not improbable that this depression of vasomotor tone is general, and the predominant congestion which occurs in the internal organs, and in the splanchnic area especially, is due to the physical law necessitating the flow of blood to the area of least resistance. A close analogy, if not identity, thus appears to exist between the essential conditions in cholera infantum and sunstroke.

baths by sponging and fanning, and he should lie upon a cot rather than a bed or the nurse's lap.

The subject of diet for infants has been so fully and satisfactorily discussed that I do not feel I have occasion to enter upon it here further than to call attention to one or two points which I consider of great importance. It can not be too carefully borne in mind that the administration of food improper in kind or quantity may produce fatal injury; and it often happens that the question must important to be settled is not as to what kind of food, but whether any food at all should be given (Jacobi). If the only evil result of giving improper food were that it failed to be digested and passed through the alimentary canal without adding any material to the organism it would be a matter of slight importance; but this is far from being all. Undigested food undergoes chemical changes which bring into existence substances that act as irritant poisons upon the surface over which they pass, not only sitting up inflammation, but causing copious transudation of material which the patient can ill afford to lose. By withholding food for six or eight hours at a time not only is the patient saved from this loss, but most salutary rest is afforded to the digestive apparatus. It is very difficult to enforce this practice, for it is hard for a mother to resist the crying of her child for food, and it will be very certain to run counter to the convictions of the sympathetic friends who may know of the child's illness, and who watch with critical eye the doctor's whole course of procedure. The child cries rather on account of thirst, however, than for food, and it is eminently proper to give water to the fullest extent that the stomach will retain it. It will be found advantageous to give it in small quantities at short intervals. But there are cases in which the stomach will not tolerate even small quantities of cold water, and in these it will generally be found that water as hot as can be borne, in tablespoonful doses frequently given, will readily be retained.

In a paper on Infantile Diarrhea by Dr. Jacobi, that appeared two years ago, attention is directed to the importance of excluding oleaginous matters from the diet as far as possible, as these are liable to undergo chemical changes, giving rise to fatty acids which are peculiarly irritant to the intestinal mucous membrane. The fact of this liability makes the question of alimentation in this disease an especially difficult one. Oil enters largely into the normal food of the child and can not be left out without serious injury. The rapid emaciation to be seen in intestinal diseases of children is undoubtedly due largely to the failure of assimilating oil. Fortunately we are not without a resource by which this difficulty may be met with a fair degree of success. It was long ago established by an experiment of Schreger that oil is rapidly absorbed by the skin of young animals, and we have abundant clinical evidence of the value of inunction in treating diseases of children.*

*I know of two instances which prove distinctly that

It is peculiarly indicated in the disease under present consideration. Further on I will refer more particularly to this point.

There is no disease in which the appropriate administration of drugs is followed by more definitely favorable results, and none on the other hand in which their misapplication is capable of more injury than summer diarrhea of infants. A few doses given during one day may correct some fault of digestion and materially set forward the patient toward recovery; but a few doses, or even one, may also increase the disturbance already existing and bring down the delicately adjusted balances upon the side of death. There is therefore no disease in prescribing medicines for which greater circumspection is needed. In casting about, however, for a remedy in a given case we have, I think, a crucial test for any medicine that may occur to our mind. It is the question, Is there danger of its interfering with digestion? Under this test tannin in all its vegetable combinations must be condemned—certainly in every case in which there is gastric irritability and probably in the initial stage of every other case.

In a large proportion of the cases of infantile diarrhea we meet, especially in those more properly termed cholera infantum, nausea and vomiting are the symptoms with which we have first to deal; for until the patient is relieved of these little can be done in the way of administering either food or medicine. For several years it has been my practice to prescribe for these symptoms hot water to be given at short intervals. It will be found, too, an excellent plan to give it just before food and as a vehicle for medicine. It serves the double purpose of quieting gastric irritability and satisfying the great demand of the organism for water, though it may not give immediate relief to thirst. Hot water is *facile princeps* among the remedies I use for nausea and vomiting. I usually prescribe at the same time from an eighth to quarter of a drop of creosote and a grain of potassium chlorate dissolved in peppermint water, to be taken in hot water as occasion requires. This also acts in a two-fold way—as a sedative on the mucous membrane of the stomach and as a destroyer of the organisms involved in fermentation. I find it rarely necessary, if I see a case from the beginning, to prescribe any thing further for these special symptoms. Occasionally I get good results from small doses of calomel—a twelfth to a sixth of a grain. The cases in which this remedy has seemed to me particularly applicable are those in which dentition plays an especially important

the scalp is especially capable of absorbing substances applied to it. One is the case of a young lady who passed quite profoundly under the influence of alcohol applied quite thoroughly to the head (not to the hair only), and the other occurred in my own experience. At a time when I had used very little quinine, and was peculiarly liable to its physiological action I used a hair-tonic containing the drug in considerable quantity. I do not know that I ever felt quinine more decidedly than on this occasion.

role. There is no theory that I know of to explain the efficacy of non-purgative doses of calomel as a sedative except that which supposes a small part of the salt is changed in the stomach to the bichloride, which is also a powerful antiferment. If these remedies fail I conclude the symptoms depend on some other cause than simple hyperemia of the lining of the stomach—that the pathological process has advanced a step further, and gastritis is present. For this I continue the use of hot water, and use in lieu of other remedies nitrate of silver—a grain dissolved in four or five ounces of distilled water, which is given in teaspoonful doses every two or three hours.

The next symptom to be considered is diarrhea. I am confident that for this the routine practice of giving astringents so often carried out is thoroughly bad. I know that patients often get well under the use of kino, catechu, and krameria, and the various mixtures in which one or the other is the principle agent; but if they are at all severe I believe the recovery would be more properly called a survival than a cure. Of all remedies bismuth is perhaps the one most frequently prescribed, and in many cases it no doubt acts satisfactorily, but because it has often disappointed me I rarely prescribe it. In many cases, the majority perhaps, I do not find it necessary to prescribe anything especially for this symptom. The proper application of cold, the use of the measures laid down above for gastric irritability, and a suitable diet will generally be found sufficient to accomplish a cure. But if the diarrhea persists I give hydrochloric acid, to a child one year old, in one drop doses, largely diluted with sweetened water. If this does not give quite prompt relief, opium in proper doses may be added, I know of no remedy more efficacious in a large number of cases of diarrhea, both in children and in adults, than hydrochloric acid. The only circumstance I am aware of that contraindicates it is the existence of nausea. This symptom must first be controlled, otherwise it will not be retained. Hydrochloric acid acts not only as an antiferment and a direct aid to digestion, but very favorably upon inflamed mucous membrane, as is shown, for instance, in its local application in cystitis.

In a considerable proportion of cases, after the severer diarrhea has been controlled a certain degree of looseness of the bowels continues, which keeps the patient weak and fretful. This state of things, particularly in one of delicate constitution and who has passed through protracted dentition, may last for weeks or even months, and is due to enfeeblement of digestive power and the impaired tone of the intestinal blood-vessels. This condition might be properly called subacute or chronic follicular enteritis, for the intestinal glands are especially involved. In these cases vegetable and mineral astringents are usually pushed indefinitely; and though I believe these agents are better adapted to this stage than any other, I think we have a far better remedy. This is nux

vomica. I give the tincture in from one to three drop doses to a child one year old, and generally in connection with hydrochloric acid. Nux vomica being one of the very best stomachic tonics, and an excellent vasomotor tonic, also combines properties exceedingly well adapted to this state of things.

Very frequently in infantile diarrhea the stools are observed to be whitish from absence of biliary coloring-matter. You are all aware that this condition has often been explained by that extremely indefinite term, "torpor of the liver," and that calomel has been given in cases innumerable "to stimulate" and "stir up" the delinquent organ. This much-abused viscus is utterly innocent of any such charge. The true explanation is this: That the mucous membrane of the duodenum is congested and swollen, and that lining the common duct often partakes of the same condition, which results in obstruction to the flow of bile, and, further, that the quantity which finds its way to the intestine is so greatly diluted by the large amount of fluid discharged from the bowels that very little color may be imparted to the stools. No jaundice generally results from the obstruction in these cases, because, owing to the large amount of food assimilated and the great loss of material involved in the disease, secretion of bile is greatly diminished; calomel is therefore clearly not the remedy. It is a fact, however, that an increased discharge of bile may follow the administration of purgative doses of calomel under these circumstances, and it is probably explained in the following way: That the peristaltic action of the small intestine is vigorously stimulated by this drug and the anatomical relation of the bile-ducts with the duodenum is such that a strong peristaltic wave may, by pressing upon the distended ducts, force the bile through the partially obstructed common duct; and, further, it is supposed that the stimulation exerted by calomel upon the muscular coat of the small intestine is felt also by that of the bile-ducts. Under this view colorless stools present no special indications.

I will close with a few remarks upon the manifestations which arise from brain and nerve disturbance in this disease. The restlessness and the tendency to convulsions which appear early in infantile diarrhea are almost invariably associated with teething, and the most efficient of all remedies is to scarify the inflamed and swollen gums. This will often not only relieve the brain-symptoms, but put a stop to all others. If any additional sedative is needed, bromide of potassium and chloral may be given with advantage. But a tendency to convulsions comes on late in the disease which is of an entirely different significance and requires entirely different treatment. To administer the bromides or chloral at this time would be a blunder that might prove fatal. Stimulants, when they can be given, defer nerve-storm for a while, but the preeminent need of the organism is for food. You have all perhaps

noticed the appearance of the little sufferer in this condition. His features are emaciated to the last degree and pinched. His eyes are stretched wide open and he lies sleepless for many hours. He follows the movements of those about him with wide open eyes lit up with a strangely premature intelligence. A little later his eyes are seen to be slightly 'crossed'; a little later still there are twitchings of the facial muscles. Then come general convulsions, then coma, then death. The child dies of starvation. The eager, wistful expression of his face tells that every tissue, every cell, and, more than all the rest, those of the brain and nerves are begging to be fed.

But, though it may be impossible to feed a patient in this state either by the mouth or the rectum death is not inevitable. There remains still an important resource: the patient may be fed through the skin. I have seen children who had reached the state I have described pass into a natural, tranquil sleep after the inunction of cod-liver oil or cocoa butter, and awake with renewed strength and able now to retain food taken into the stomach. This striking result is easily understood. From the time the tissues cease to get adequate nourishment from ingested food the brain and nerve-tissue feed upon the fat stored up throughout the body, and no profound nervous disturbance occurs. This, however, at length becomes exhausted and nervous manifestations begin at once; but the happy circumstance that oil is readily absorbed by the skin puts it in our power at this supreme moment to satisfy the pressing demand for the kind of food now needed above all other. As soon as this is supplied the brain and nerve return to their normal functions. It is in this connection a very significant truth that about two thirds of the solid organic matter of brain-substance is made up of fat.—*Med. News.*

LOSS OF MOTION IN CHILDREN.

This is an affection which occurs often. I will illustrate a case or two, of which I can find no mention in any book.

A child is pulled, dragged or lifted by the arm in a quick manner, for example, over a gutter. The child cries aloud, drops his arm down after it is released, and has lost completely the motion of that arm for the time being.

The parents becoming alarmed, send for a doctor to ascertain what is the matter. He examines it all around, and, like many others, concludes because there is a loss of motion, "there must be a fracture, though he is not sure, because it is a child, and it is hard to tell what the real trouble is in a child." I have been sent for more than once under such circumstances to set a broken arm, but could not find the fracture; a simple loss of motion comprehends the whole of the affliction.

A second case, a child falls, the nurse jumps

and runs to pick up the poor darling, in most cases by one hand, with a quick motion, a little anger probably mingled with it, "of course it is always the nurse, mothers never commit such blunders!" The child screams bitterly, his arm drops down, it cannot move it; follows excitement in the previous peaceful household. I have been sent for frequently in such cases, either by parents or by request of the family physician, to reduce a supposed dislocation; but no dislocation is to be found, simply loss of motion. Fractures and dislocations of course can and are produced in such manner, and sometimes separation of the epiphysis. But it is to the loss of motion to which I call your attention; it is fortunate, however, for the little patient and fortunate for those concerned, that you can console them with the assurance that the limb will be restored to its proper position in time, almost without any treatment, except rest and some mild embrocation, providing you find sensation unimpaired; one should carefully examine and satisfy himself of this, else the case may then assume a more grave aspect.—*St. Louis M. and S. Journal.*

CODEIA BETTER THAN MORPHIA.

Dr. Garrison (*Western Med. Reporter*) claims that numerous comparative therapeutic tests in this practice with morphia and codeia warrant the following conclusions:

1. That codeia is a greater cardiac stimulant than morphia, is indicated by the greater force and volume of the pulse following the administration of the former.

2. It is a more powerful diffusible stimulant, elevating the temperature and exciting the capillaries. Large doses produce an intense itching, with an erythematous redness of the skin, thereby indicating its use in all internal congestions, save perhaps those of cerebral or spinal origin.

3. It does not check the secretion to such an extent as morphia. It is therefore indicated when it is desired to avoid locking up the liver, constipating the bowels, or lessening expectoration.

4. It is greatly less dangerous than morphia, no lethal dose having been recorded, yet so potent an agent should necessarily be exhibited with due caution. Its comparative safety recommends its use in infantile therapeutics where morphia is so rarely tolerated.

5. It is never followed by the intense nausea which so often contraindicates the use of morphia, and frequently no unpleasant after-effects are noticed referable to its exhibition.

6. There is less danger from the induction of the opium-habit from repeated doses than is the case with morphia, which should be a matter of serious consideration in making a choice between the two.

The sulphate is the form to be preferred, because of its ready solubility. The dose is about double that of the sulphate of morphia, but it may be in-

creased with safety to a much greater extent than the latter; the objection to large doses being the excessive itching which is produced, together with the intense erythema, both of which disappear coincident with the elimination of medicine.

It is an excellent adjuvant in combination with other anodynes, such as chloral, the bromides, hyoscyamus and Jamaica dog-wood, adding to their efficacy and modifying their action desirably.

TREATMENT OF THE PLACENTA AFTER ABORTION.

Dr. Stanley P. Warren, of Portland, presented a practical paper on this subject at the late meeting of the Maine Medical Association, in which he classified abortions under four heads, advocating primary extraction of the placenta without leaving the result to nature, observing, of course, all proper precautions with reference to shock, and hemorrhage.

Class 1.—Sudden flooding, cervix open, severe shock, and it is unknown whether the placenta has been expelled or not.

Class 2.—Moderate hemorrhage; the fetus has recently been expelled; the cervix open and the placenta within reach; general conditions good.

Class 3.—The fetus has been expelled for some days; the secundines are retained; the lochia are fetid, and some form of septic inflammation is present in the pelvic cavity.

Class 4.—There has been more or less flooding; fetus has been expelled; cervix is closed, and the placenta cannot be reached by the finger, general condition good.

Cases were cited illustrating each of these divisions, and facts presented as to the subsequent condition and labors of these patients.

For the first class the recommended procedures which should relieve shock and check hemorrhage, and as soon as reaction was well established, the contents of the uterus, if any, should be removed.

In the second class there seems to be no question as to the propriety of immediately evacuating the uterus, if the placenta is free and can be removed *without preliminary dilatation of the cervix*. It is to be regarded as simply a foreign body. There is less danger of injury to the tissues with the finger than with the curette; it also has the advantage of the sense of touch. The curette, on the other hand, causes less pain, and may be used with or without the speculum; has not found the ovum forceps as safe as the curette, still less than the finger, and ought to be used very cautiously in the uterine cavity.

In the third class, where we have present or impending some metritis, no good reason obtains why the uterus should not be within 24 hours, relieved of its contents and thoroughly cleaned; the cervix is usually patent and requires no dilation a dull curette, followed by intra-uterine, not

carbolyzed, injections, will accomplish every desired object in the way of removal. The quicker the focus of infection is taken away, the less is reparative action delayed and septicemia to be expected.

In dealing with class third, when the fetus is expelled, but the placenta shut up in the uterine cavity, obstetricians must choose whether they will "do nothing," relying upon rest and opiates, or mechanically dilate the cervix, perhaps, with a sponge tent, and, as they say, "let nature take its course," or they *may remove* the placenta within twenty-four hours after the expulsion of the embryo, using dilators for some hours before operating, or dilating with the finger and immediately extracting.

On these points of procedure the most distinguished obstetricians and gynecologists in the country differ.

It has been urged in objection—

1. It is unnecessary, since the vast majority of patients do well if let alone.

2. It is the finger, curette, or forceps that does the damage, rather than the retained placenta.

3. It is very difficult, perhaps impossible, to remove an adherent placenta, and septicemia can be caused by a placental tuft as surely as by the entire organ.

To these objections the Doctor replied:

1. These tonic contractions are essential to the arrest of hemorrhage; there cannot be tonic contractions until the placenta is expelled, and the less will be the hemorrhage existing or possible.

2. Anxiety in both patient and physician will be prevented by early completion of the abortion.

3. Time is gained in uterine involution.

4. Absorption of putrilage from retained secundines is unquestionably the most frequent sequel in abortion; when the uterus is thoroughly disinfected, septicemia is evidently imaginary. Possible accidents from manipulation are not a sufficient reason for permitting a placenta to be removed by decomposition, ignoring the fact that self-imprisonment must be imminent; by early removal, therefore, of the placenta, septicemia is prevented.

5. Clinically, after abortion, metritis can rarely be traced to direct mechanical violence. If lesions have occurred in the process of extraction, infection in any empty uterus must be slight when compared with one in which the entire absorbing surface is exposed and covered by a decomposing placenta.—*Phil. Med. News*.

TONGA.

Dr. Edward C. Mann (*Ther. Gazette*), in speaking of the efficacy of tonga in an inveterate case of neuralgia appearing after sunstroke, says: "All remedies had been tried, including hypodermics of morphia and atropia, when I happened to think of a sample of tonga sent me. I administered half a teaspoonful, and in half an hour the patient experienced a sense of general warmth diffusing

itself over the body, with some slight alleviation of the excruciating pain. After a second dose of half a teaspoonful a sense of drowsiness came on, and sleep with entire relief from pain; the paroxysms decreased in frequency, and are cut short in the manner described. I have put my patient on a constitutional treatment of cod-liver oil and arsenic, with instructions to take up tonga when needed." Dr. Mann adds that he has thus used tonga in this one case, but adds that it was a typical one of great severity. — *American Medical Digest*, June, 1882.

THE CANADA MEDICAL RECORD,

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CANADA MEDICAL ASSOCIATION.

The fifteenth annual meeting of the Canada Medical Association was held in the City Council Chambers, Toronto, on the 6th, 7th and 8th September. There was an unusually large attendance of members, and great interest was manifested in the proceedings. The reports and papers read before the Association were very creditable; they were carefully prepared and well received, the discussions which they evoked being general and animated. The chair was ably filled by Dr. Fenwick of Montreal, whose genial manner did much to promote the good feeling and harmony of the meetings. The forenoon sessions were devoted to the reception and discussion of reports and the transaction of general business; the afternoon and evening sessions to special work in sections. Some interesting pathological specimens were on exhibition, the most noteworthy were a series of Aneurisms shown by Dr. Sutherland, specimens of Echinococcus Disease by Drs. Osler, Black and Metcalf, and microscopical demonstrations of Tubercle Bacilli and Anthrax Bacilli by Dr. Osler. Dr. O'Reilly, Medical Superintendent of the Toronto General Hospital, exhibited a new ambulance waggon, constructed for the conveyance of accidents and surgical cases to the Hospital; it is

complete in its arrangements, tasteful in appearance, rides comfortably, is light enough to be drawn by one horse, and always available at a few minutes' notice. The members of the Association were invited to visit the Hospital and were shown every courtesy by Dr. O'Reilly. The Local Committee, with Dr. Canniff as chairman, did all in their power to make the visit to Toronto a pleasant one. An invitation was extended to the Association to be present at the formal opening of the Toronto Provincial Exhibition on the afternoon of the 6th. On the evening of the 7th a most enjoyable conversation was held in Normal School buildings. The grounds were illuminated by Chinese lanterns, and the theatre, library and museum were lighted up and thrown open for promenade. During the evening addresses were given by Drs. Canniff, Workman, Fenwick and W. B. Carpenter, and an excellent musical programme rendered. While supper was being served, the band of the 10th Grenadiers played a selection of music. On the 8th the regular business was concluded, and the Association adjourned to meet next year in Kingston under the presidency of Dr. Mullin of Hamilton. The members were entertained at luncheon by Dr. D. Clark, superintendent of the Toronto Asylum for the Insane, and then separated, declaring the meeting of 1882 to have been "a grand success."

THE VITAL STATISTICS SCHEME.

At the last meeting of the Montreal Board of Health, Dr. LaRocque, the Medical Health Officer, made the following report :

"The Federal Government having voted \$10,000 for the collection of vital statistics throughout the Dominion, and as several schemes were proposed to attain the object in view, the opinion of a few medical men was asked in reference to the matter, and it was resolved to refer the subject to the Canada Medical Association, which held its Convention on the 6th, 7th and 8th instant. The committee appointed on vital statistics met and discussed the question with great earnestness, and brought a resolution before the Association, recommending the Government to collect vital statistics from the principal cities of the Dominion, and especially from cities in which Boards of Health were established, and also that a commission composed of at least ten medical men, with a legal adviser, be appointed to study the question of public health in all its bearings, and report to

Government. I have much pleasure in reporting that Montreal is recognized as the most advanced city in sanitary matters, being the only one where a regular Board of Health is organized. It would be very important that your Board should consider this question of public health, as Montreal and even the whole of the Province of Quebec are greatly interested in the matter."

DEATH OF DR. MAJOR HIRAM MILLS.

Many of our readers will recall the fact that some few years ago mention was made in these pages of the effort then being made in Montreal to establish "*The Western Hospital*," and of the handsome donation of \$12,000 towards the erection of a Mills' Wing by Major H. Mills. The ground was purchased and the building erected, and it is now in successful operation as the Woman's Department of the Western Hospital. This alone would have induced us to record the death of Major Mills, which took place on the 4th of August last at an advanced age, but the fact that he was a physician, which was known only to a few, gives him an additional claim. Dr. Mills first settled at Lennoxville, in the Eastern Townships, about the year 1867. About 1870 he removed to Montreal, and at once identified himself with philanthropic work, interesting himself a good deal in the Montreal General Hospital, becoming one of its Governors. It was the short-sighted policy of that Institution towards the Bishop's College Faculty of Medicine, which aroused the ire of Dr. Mills, and led him to offer \$12,000 towards an hospital in the west end. No one in Canada knows much of the early history of Dr. Mills beyond the fact that for years he practised as a physician in one of the Southern States. He left almost his entire fortune to McGill University and to the Church of England. He was possessed of many good qualities, but was somewhat pronounced and eccentric in his views. A singular outcome of the latter being the fact that the Institution in which he seemed, so long as reason remained with him, to take a warm and anxious interest was entirely forgotten in his donations. It would be interesting to ascertain how this came about.

FIFTEENTH ANNUAL MEETING OF THE CANADA MEDICAL ASSOCIATION.

The Association met on the 6th, 7th and 8th September in the City Council Chambers, Toronto, the President, Dr. Fenwick, in the chair. The session opened at 10.30 a. m. After the transaction of routine business,

Dr. FULTON, Toronto, read the report on Necrology; the following physicians, practising in the Dominion, have died during the past year:—Dr. Berryman, Toronto; Dr. T. Mackay, St. Catharines; Hon. D. Brouse, Ottawa; Dr. N. Fleming, Mildmay; Dr. H. Parsley, Thornbury; Dr. J. A. Purney, Shelburne, N.S.; Dr. A. Robertson, Liverpool, N.S.; Dr. W. G. Middleton, Stella; Dr. N. Munro, Brucefield; Dr. McMichael, Gorrie; Dr. G. Cook, Norwich; Dr. J. Allen, Adolphustown; Dr. J. B. Smith, Jerseyville; Dr. G. Lount, Norwich; Dr. A. J. Whitehead, Toronto; Dr. W. Philp, Manilla; Dr. H. H. Boulter, New Hamburg; Dr. W. Wilson, Dorchester, N.B.; Dr. J. P. Lynn, Toronto; Dr. C. W. Heltz, Chester, N.S.; Dr. A. R. Lander, Frankville; Dr. W. Weir, Merrickville; Dr. H. Yates, Kingston; Dr. H. Orton, Ancaster; Dr. McCay, Blairton; Dr. Munro, Montreal; Dr. F. H. Wright, Toronto; Dr. H. Bingham, Manilla; Dr. A. McKay, Beaverton; Dr. G. W. Campbell, Montreal; Dr. Maxwell, Bear River; Dr. McIlmurray, Toronto; Dr. H. H. W. Lloyd, Coldstream; Dr. H. E. Bisset, Hawkesbury; Dr. T. Blackwood, Pakenham; Dr. J. Salmon, Simcoe; Dr. A. Greenlees, Toronto; Dr. R. H. Wright, St. Johns, Que.

Dr. GRAHAM, Toronto, read the report on PRACTICE OF MEDICINE. He said that from a medical point of view the two most remarkable events during the past year were the International Medical Congress at London, and Koch's experiments on Tubercle Bacilli. He then discussed the etiology and morbid anatomy of tubercular disease, and described Koch's experiments and deductions. He supported Koch's views, and believed that a great advance had been made towards the prevention of disease. He believed that many cases of tuberculosis were set down as typhoid fever. In adults, tubercular disease generally appears in the lungs, the germs being inhaled in the breath; in children the germs seem to enter the stomach with the food and passing along into the intestines develop there.

Dr. W. B. CARPENTER of London, England, well

known to the profession as the author of a standard work on physiology, was elected an honorary member of the Association, and invited to give his views upon Vital Statistics. His address will be found in another column. In the afternoon the Association broke up into sections.

THE MEDICAL SECTION.

Dr. McDONALD of Hamilton was elected Chairman, and Dr. STEWART of Brucefield secretary.

Dr. OSLER, Montreal, read a paper on *Echinococcus Disease in America*. The introduction into the human system of the ova of the *taenia echinococcus* of the dog undoubtedly produces a disease of the most serious character. All the internal organs become disordered and hydatid cysts form in the liver, spleen, lung and kidney. Cases are reported in Iceland and some parts of Europe and America. On the whole the disease is very uncommon in America. In Canada he had been able to collect notes of only 9 cases; in the United States the disease is quite as uncommon, 52 cases being all that he could find recorded, making 61 cases altogether in America. Only a few specimens are to be found in the museums; Cobbold says that the only specimens exhibited in the museums of Great Britain have been reared artificially. Its infrequency in the human subject in America is attributable to its infrequency among the dogs. In Iceland fully one-sixth of the dogs suffer from it, hence the disease is very common among the Icelanders. It is calculated that fully one-third of the cases in America have occurred among emigrants and have probably been imported. The ova are introduced into the system chiefly by means of drinking water, which has become contaminated with the excreta of dogs suffering from the disease. The treatment adopted in Iceland and Australia is either tapping or incision. Sometimes the disease is cured spontaneously, either by the bursting of the cyst and discharge of its contents through the bowels or lungs, or by the hardening of the walls of the cyst and the consequent death of its inhabitants.

Drs. GRAHAM and TEMPLE related cases of echinococcus disease which had come under their observation.

EVENING SESSION.

At 7.30 p.m. the President, Dr. Fenwick, read his address. He sketched the history of the Canada

Medical Association, and dwelt upon the great importance of such Associations to the medical profession and the public at large. He spoke of the important functions of the British Medical Association, and pointed to it as a model of what the Canadian Association might be and do. He said that the Canadian Association might now be celebrating its jubilee as the British Medical Association had just done, had it not been for the unfortunate disagreement which had occurred among those who originally met to organize it. He wished to place the facts of this disagreement on record, as the witnesses of it were fast passing away. He hoped that harmony would now exist, and that the work of the Association would improve the status of the profession in Canada. He then dwelt at some length on the importance of sanitary legislation, a subject which is now attracting so much attention in Great Britain. He hoped that the same attention would be shewn it at Ottawa. A sum of \$10,000 had been placed at the disposal of the Minister of Agriculture for the collection of statistics, but unless the scheme adopted met with the approval and support of the medical profession throughout the Dominion, that sum of money would do very little towards obtaining reliable information. He thought that in order to prevent failure they should commence the collection of statistics in the large cities only, the area of work being expanded as means and opportunity permitted. He recommended that a committee be appointed to confer with the authorities at Ottawa, and suggested the re-appointment of the old Committee.

Dr. BOTSFORD, New Brunswick, said that the subject of public health should be again pressed upon the Government. The Government looked to the Canada Medical Association to formulate some system, and he was strongly in favor of carrying out the President's suggestion to appoint a committee for that purpose. He moved a vote of thanks to the President.

Dr. GRANT, Ottawa, said that the Ottawa Government was willing to co-operate with the Association in anything that would tend to ameliorate the public health, and was prepared to give them substantial assistance in the collection of vital statistics. He seconded the vote of thanks to the President, which was duly put and carried.

The members then divided into sections.

MEDICAL SECTION.

Dr. MACDONALD, Hamilton, chairman of the

Section delivered his address, briefly reviewing the work done by the Association.

Dr. CAMERON, Montreal, read a paper on *Axis-traction*. He criticised the pelvic axis as ordinarily figured and described in text-books, and supported the views advanced by Dr. Studley of New York in the *American Journal of the Medical Sciences* (January, 1882). He maintained that in vertex presentations the head descends in the axis of the brim till it reaches the floor of the pelvis, which checks its progress and directs it forward under the pubic arch in the movement of extension. In forceps delivery traction should be made as nearly as possible in the line of the pelvic axis; consequently in high operations, the traction should be made backwards in the direction of the axis of the brim, until the head comes well down upon the floor of the pelvis; then, and not till then, should traction be commenced anteriorly. He exhibited models of the straight, double-curved, and Tarnier's axis-traction forceps, and discussed the relative advantages and disadvantages of these different varieties in high operations. The *straight* forceps are correct in principle, for the axis of the *handle* corresponds to the axis of the blades, hence traction can be made in the pelvic axis. Their great disadvantages are difficulty of application and liability to slip. The *double-curved* forceps are contrived to overcome the disadvantages of the straight instrument. They give a firmer grasp of the head, are less liable to slip, are easier of application and more powerful. But their great disadvantage is that the axis of the handles does not correspond to the axis of the blades, hence traction cannot be made directly in the line of the pelvic axis. They gain in strength but lose in axis-traction, and hence require the use of extra force, which is expended upon the foetal head and maternal soft parts.

The *axis-traction* forceps of Tarnier combine the advantages of the straight and double-curved forceps without their disadvantages. The instrument is powerful, and gives a firm grasp of the head, while by means of the sharp perineal curve on the traction rods, the axis of the traction handle is made to coincide with the axis of the blades. Hence the line of traction can always be in the line of pelvic axis, without pressing back or injuring the perineum. The other advantages of the Tarnier forceps were described; the objections which have been urged against them were stated and criticised. Tarnier's forceps are most suitable for high opera-

tions; Drs. Simpson, Thomas, Lusk, Fordyce Barker and others use them only to bring the head down through the brim and well into the cavity; they then remove the Tarnier, and complete delivery with the ordinary double-curved instrument. The method advocated by Dr. Albert Smith and taught by the Philadelphia School was described and criticised. Tarnier's latest model of *forceps* and his *cephalotribe*, both exemplifying axis-traction, were exhibited and explained.

Dr. ALLOWAY, Montreal, read a paper on the *treatment* of abortion, severely criticising the teachings of the ordinary text-books. He considered the tampon inefficient, ergot positively injurious, the finger insufficient, and the placental forceps dangerous. By allowing a putrid mass to lie enclosed in uterine cavity, great risk was run of septic poisoning. He exhibited a uterine scoop of his own invention which he considered most effectual, and related a number of cases in which it had been used with success. He also exhibited a new vaginal speculum, a modification of Neugebauer's, which he claimed to be base-expanding and self-retaining, and well adapted for minor gynecological work.

Dr. HOLMES, Chatham, was accustomed to use the forceps in the way recommended by Albert Smith, namely, as a lever and tractor combined. He had no experience of Tarnier's forceps, but thought their principle a good one. He dwelt upon the necessity of guarding against cervical and perineal lacerations; for this purpose he recommended the use of chloroform in the latter stages of labor, and preventing the patient from bearing down when the head is about passing through the fully-dilated os uteri or over the distended perineum.

Dr. TEMPLE, Toronto, could not see the advantage of the Tarnier forceps over the ordinary models. He had no experience in its use, but could speak from experience in praise of other forms of forceps, particularly the straight forceps. He thought that no instrument was so suitable in occipito-posterior presentations as the straight forceps. He thought Tarnier's forceps too complicated, and believed that the simpler the instrument the greater would be the facility in using it. He also believed that the pelvic axis, as ordinarily figured in books, does not exist; such teaching is very fallacious.

Dr. TYE, Chatham, said he really thought that we were passing through an *iron age* in the matter

of obstetrics and gynecology. After seeing all the forceps, scoops and other instruments which had been exhibited he really congratulated himself that he was not a woman. In his practice he relied chiefly on the instruments provided him by nature, and found them to be very suitable. He wanted no better scoop than his finger.

DR. CAMPBELL, Seaforth, said that he had heard Professor Simpson of Edinburgh, whose opinion is of great weight in such matters, express himself decidedly in favor of Tarnier's forceps. In fact, Professor Simpson rarely uses any other form of forceps.

DR. RODGER, Montreal, said that while he disapproved of undue multiplicity and complication of instruments, he felt that the valuable assistance rendered by them should not be overlooked. He did not approve of the placental scoop which had been exhibited, and considered it dangerous and altogether unnecessary. He spoke in favor of the tampon and placental forceps in the treatment of abortion, and held that improper application of the tampon accounted for its frequent failure.

DRS. CAMERON and ALLOWAY having spoken in reply, the Section then adjourned.

SURGICAL SECTION.

The Surgical Section met in the afternoon, and elected DR. GRANT of Ottawa, chairman, and DR. ROSS, Jr., of Toronto, secretary. The Section then adjourned till evening.

On resuming,

DR. RODDICK, Montreal, exhibited a patient who had suffered for many months from a very painful spasmodic contraction of the muscles of one side of the neck. The man was obliged to hold his head between his hands constantly. Dr. Roddick divided the muscles, but with only temporary effect; he then applied the actual cautery frequently to the back of neck with most satisfactory result, as the man is now perfectly well.

DR. MAJOR, Montreal, read a paper on *REST AND TRACHEOTOMY*. He urged the importance of rest in all cases of disease of the larynx and throat, and condemned the use of gargles. He called attention to some points in the early diagnosis of laryngeal cancer heretofore unnoticed, and suggested the use of gold instead of silver or any other metal or material for the tubes. As far as he knew he was the first to recommend its use.

DR. RYERSON, Toronto, agreed with Dr. Major

as to the value of rest in laryngeal troubles, and described a case in which he had performed tracheotomy successfully.

DR. ELSBERG, New York, said that he held it to be the duty of those who had devoted themselves to special subjects to give the results of their experience to their professional brethren. Some years ago his attention had been drawn to the fact that the principle of rest in cases of inflammation applied to the throat as well as to any other part of the body. Under the influence of rest inflammatory conditions subsided, and perhaps gave way to a renewed action. The larynx was moved in three functions, viz., in the production of voice, in breathing and in swallowing. The first is a voluntary action, consequently it is possible in this respect to secure complete rest. Breathing, though absolutely necessary for life, might be made easier, and by tracheotomy the larynx might be relieved from active participation in respiration. Is it advisable to practice tracheotomy for this purpose? He did not share the opinion that it is a simple or harmless operation, but he regarded it as very valuable in appropriate cases such as stenosis. With regard to the third function, swallowing, tracheotomy does not afford complete rest, but other means might be used to give partial rest.

DR. HINGSTON, Montreal, asked Drs. Major and Elsberg to state in what cases they would or would not recommend tracheotomy. While rest might alleviate he did not believe that it could ever cure malignant disease.

DR. ELSBERG, in reply, stated that he would recommend tracheotomy in all cases where stenosis called for it. With regard to the other point raised by Dr. Hingston, he wished to make it clear that he had not enunciated the opinion that rest could cure malignant disease, but that it might arrest its progress for a time.

DR. FENWICK, Montreal, considered that rest retarded the progress of malignant disease.

DR. SHEPHERD, Montreal, read a paper on *Cervical Ribs*, which gave rise to some discussion. He also exemplified an appliance for "*caked breast*."

DR. GRANT, Ottawa, read a paper on *Cancer of the Breast in its Relation to Disease of the Nipples*. The discussion which ensued was participated in by Drs. Hingston, Fenwick and Ross, jr.

The Section then adjourned.

THURSDAY, SEPTEMBER 7th.

The Association re-assembled at 10 o'clock, Dr. Fenwick in the chair. After routine business,

Dr. SHEPHERD, Montreal, read the report on Surgery. He referred to the great advances made in the treatment of wounds, and said that all surgeons are not antiseptic surgeons, and Listerism is only a phase of antisepticism. He considered that, in the treatment of wounds, cleanliness and antiseptic precautions are of the greatest importance. His own experience was that the healing process goes on more satisfactorily under dry than under moist dressings. Moisture only tends to favor the putrefactive process. He described minutely his own method of dressing wounds with iodoform and boracic cotton. He then touched on the different theories as to the causes of inflammation, and urged the necessity of antiseptic treatment. He gave an account of Dr. Hamilton's experiments with sponge grafting, which was found to be particularly useful in ulcers, and where the formation of new tissue was required. Dr. McEwan of Glasgow, and Dr. McManus of London, had succeeded, by means of sponge-grafting, in effecting the formation of new bone. He remarked that no organ is now considered sacred by the surgeon, and spoke of the wonderful success that has recently attended the operations of Nephrotomy and Nephrectomy. The treatment of club-foot was then glanced at, and the opinion of the members asked as to advisability of the early division of the Tendo-Achillis. Personally he believed that this tendon should be spared until it had been found that the division of the other tendons was not sufficient to effect a reduction of the deformity. He thought that the great use of sparing this tendon was to give a *point d'appui* for manipulation. Dr. Shepherd concluded his very able report with an account of the late improvements in the surgery of the joints, and discussed the question of the excision of joints for joint disease.

Dr. BRODIE, Detroit, a delegate from the American Medical Association, was here introduced by Dr. Canniff. Dr. Brodie, on behalf of the American Association, expressed good wishes for the success of the Canadian Association. He said that next year the American Association would meet at Cleveland, which was very convenient and accessible to Canada, and he hoped to have the pleasure of seeing many of the members of the Canadian Association present on that occasion.

Dr. CANNIFF, Toronto, moved a vote of thanks to Dr. Shepherd.

Dr. GRANT, Ottawa, seconded the motion, complimenting Dr. Shepherd upon his admirable *résumé*. He referred to the valuable researches and discoveries of Pasteur, and emphasised the importance of antisepticism in medicine and surgery.

Dr. RODDICK, Montreal, while congratulating Dr. Shepherd on his admirable report, disagreed with him as to the relative value of dry and moist dressing. From his hospital experience he was not favorably impressed with dry dressings. Moist antiseptic dressings are superior to the dry in major operations where drainage is necessary. Lister's method, when properly carried out, is of the greatest importance. His own results and those of Dr. Fenwick have been remarkably improved since adopting the Listerian method, and they now confidently undertake operations which they would have considered impossible with the old methods. In the Montreal General Hospital they almost outlist Lister; the more he sees of the method and its results, the more he recognizes the necessity of carrying it out faithfully in its smallest details. In the treatment of clubfoot he differs from Dr. Shepherd; he believes in dividing the tendo-achillis at once, and he rarely finds it necessary to divide any of the other tendons.

Dr. HINGSTON, Montreal, remarked that antisepticism and Listerism are not convertible terms. There is no surgeon now-a-days who does not believe in antisepticism, by which he understands complete cleanliness in the treatment of wounds. Suppuration may be prevented by scrupulous cleanliness, without the employment of Lister's method. Some years ago he saw the late Sir James Simpson of Edinburgh amputate a breast, the most scrupulous attention was given to cleanliness, and dry dressings were applied. Simpson predicted that no suppuration would take place, and sure enough not a drop of pus formed. From his own experience he was not quite satisfied as to the safety and value of the carbolic spray, especially in abdominal surgery. He does not use the spray in ovariectomy. With regard to the treatment of club-foot, he agreed with Dr. Shepherd in condemning the early division of the tendo-achillis; in the majority of cases he did not consider this tendon to be at fault.

Dr. MACKAY, Woodstock, had succeeded in curing club-foot without performing tenotomy.

Dr. SLOANE, Blythe, considered the introduc-

tion of the antiseptic method of dressing of wounds to be a great improvement. The country practitioner can now undertake operations he would not formerly have dared to attempt.

Dr. WORKMAN, Toronto, referred to a reported case of the successful use of whiskey dressings.

Dr. FERGUSON, Toronto, made a statement as to the strength of spray used by Dr. Keith in his later ovariectomies. He had employed a spray of 1 x 30, or even stronger, instead of 1 x 60 as recommended by Lister for cases of ovariectomy. Had he adhered to the weaker spray he would probably not have had evil results from it.

Dr. STEWART, Brucefield, mentioned that a well-known surgeon was obliged to give up the use of spray on account of its invariably causing him to suffer from hæmaturia.

Dr. HARRISON, Selkirk, did not understand the separation of antisepticism from Listerism. In a very humorous speech he described the trials and troubles of inventors. He was very thankful that in the country districts they had never invented or discovered anything.

Dr. CANNIFF, Toronto, did not think that the whole credit of antiseptic surgery was due to Lister. M. Pasteur, and Dr. Samson Gamgee of Birmingham had rendered important services in this matter.

Dr. CAMPBELL, Seaforth, asked the President to define Listerism.

Dr. FENWICK, the President, said that would be an arduous task. His own practice is to cleanse the wounds thoroughly, and then apply the spray. He considered the use of the spray advantageous, and meant to continue its use till something better was introduced. Even with the use of antiseptics he had not found it possible always to prevent suppuration, and he was aware that others had a similar experience. He did not believe Gamgee's method of dry dressing to be in any way superior to the moist.

Dr. SHEPHERD, Montreal, in reply said that Dr. Roddick considered moist dressings better for major operations than dry dressings, because the moist gave better opportunity for drainage. In answer to this he would say that dry dressings did not require such elaborate provisions for drainage, as there was nothing to drain. The presence of the tube or other appliances for drainage only causes irritation, promotes suppuration, and prevents union; without the drainage-tube suppuration is less likely to occur, and consequently the

necessity for drainage is less. In support of the utility of dressings in major operations, he quoted the statistics read before the International Medical Congress at London. Dry dressings have been used by several eminent German surgeons in a large number of amputations, excisions, etc., with great success. In the dry method antisepticism is secured by the use of iodoform. In wet dressing the stench is sometimes intolerable; in dry dressing this is almost wholly avoided.

Dr. TYE, Thamesville, read the report on *Therapeutics*. He referred to the dangers of hasty generalisations in therapeutics as well as surgery. The power of medicine is to increase or diminish the functions of tissues or organs, not to change the character of those functions. He dwelt on the use of electricity in anæsthesia, asthenia, and suppressed menstruation, and described the effects of the different currents, the magneto-electric, galvanic, and frictional, in the treatment of different diseases. The therapeutical effects of some newly-introduced drugs were considered, nitro-glycerine among others. He remarked that although a large number of new pharmaceutical preparations had been introduced, it was questionable whether some of them were not more advantageous to the manufacturer than the patient.

Dr. CAMPBELL moved a vote of thanks to Dr. Tye, which was seconded by Dr. Stewart and carried.

Dr. CANNIFF, Chairman of the Special Committee appointed to seek from the Dominion Government improved legislation in respect to Sanitation and Vital Statistics, submitted the report of the Committee, which contained the views of Drs. Hill and Grant, of Ottawa; Hon. Dr. Parker, of Halifax; Dr. Botsford, of St. John's; Dr. Atherton, of Fredericton; Dr. Macdonald, of Londonderry; Dr. Fenwick, of Montreal; Dr. LaRocque, Health Officer of Montreal; Dr. Orton, M.P., and Dr. Oldright. A number of these views were embodied in a communication to the Premier. It was decided that the Committee should meet and consider the report, and that it should be discussed by the Association on Friday.

The Association then adjourned.

MEDICAL SECTION.

Dr. HARRISON, Selkirk, read a paper on *A Peculiar Form of Fever*, which had come under his notice, describing minutely the symptoms, progress and treatment. The fever was sometimes

remittent, subsiding occasionally for a few days, and then commencing again. He had prescribed quinine as he would do in intermittent fever, but without any beneficial result. He then changed the treatment to iodine, maltopepsin and carbolic acid. In two cases the patients died in the thirteenth and fourteenth weeks of pure exhaustion. In another case recovery took place after the eighth week. The peculiarities of this fever were its tendency to change from one type of fever to another, and its long duration.

Dr. RIDDELL, Toronto, thought these were cases of a kind of malarial fever peculiar to this part of the world, partaking of the characters of cerebro-spinal meningitis.

Dr. ROSS, Montreal, thought that from the description of these cases as submitted by Dr. Harrison the members were not in a position to discuss them. There might have been suppuration of some internal organ, such as the kidney, which could only have been ascertained by an examination of the urine. It was not impossible that there might have been ulcerative endocarditis.

Dr. TYE, Chatham, stated that some time ago a large number of cases of the kind so graphically described by Dr. Harrison had come under his observation, indeed at one time it had been almost epidemic.

Dr. HOLMES, Chatham, had had similar cases under his care. He did not agree with Dr. Riddell in the view that they were of malarial origin.

Dr. HARRISON, in reply, stated that he had examined the urine, and had not discovered anything abnormal. He had not had an opportunity of making a post-mortem examination; at any rate there was so little left of the patients by the time they died, that there would have been hardly anything to examine post-mortem.

Dr. MULLIN, Hamilton, read a paper on *Diphtheria*. He said that there were various forms of diphtheria, and in some cases other ailments were set down as diphtheria. The severity of the attack depends greatly upon the constitution of the patient and surrounding conditions. He described a case of diphtheritic croup which he had treated. He prescribed an emetic of ipecac and steamed the throat. In a few days the symptoms became unfavorable, and tracheotomy had to be resorted to. An attack of ague supervened, but at last the patient recovered. He described a number of other cases, showing that the symptoms varied according to the age of the patient, and the local and constitutional con-

ditions. He said that the low forms of animal growth that invaded the fauces and tonsils of those suffering from diphtheria were extremely tenacious of life, and he considered it advisable to destroy the bacilli or bacteria, which were undoubtedly present, by cauterization or otherwise. Opinions differed widely as to the value of treatment in diphtheria. Some held that a certain proportion of cases would recover by the unaided *vis medicatrix nature*, and that others would not recover under any treatment, and consequently they had little faith in any treatment.

Dr. HOLMES, Chatham, read a paper on *Cholera Infantum*. Since so many children die every year of this disease, its treatment is a matter of great importance. The chief causes are hot weather, damp atmosphere, defective nourishment, bad ventilation and drainage, unsuitable clothing and indigestible food. The symptoms are, elevation of temperature, abnormal character of stools, thirst, pain, and vomiting. To prevent the disease, proper alimentation, ventilation and clothing are essential. The air should be pure, and the clothing in hot weather slight. Artificial feeding of young infants should be avoided if possible; but where resorted to, the milk or other food should be perfectly pure and fresh. Cleanliness is a matter of great importance. The treatment must aim at reducing the temperature and restoring the normal character of the stools; if this cannot be done the patient will surely die. To reduce the temperature, cold sponging with or without spirits. He condemned the use of opiates either for their sedative or astringent effect, as he invariably found that they did harm. He recommended the use of castor oil in suitable cases, and minute doses of hydrargyrum.

Dr. McDONALD, Hamilton, said that the disease is not now as virulent as it used to be, and better modes of treatment are adopted. He advocated change of air, and was in the habit of sending his patients for a long trip upon the lake or river.

Dr. ROSS said that he had considerable experience in the treatment of cases of cholera infantum. He found bromide of potassium very useful.

Dr. STEWART, Brucefield, read a paper on *Three Cases of Sciatica and one of Painful Stump treated by stretching the Sciatic Nerve*. In each case he used antiseptic precautions. Nerve stretching is now recognised as an important means of curing neuralgia, but it is a practice not unaccom-

panied with danger. In some cases where the operation proved fatal, death was distinctly attributable to the use of chloroform. Ether should always be administered in these cases instead of chloroform. The statistics of the operation are very favorable: 97 per cent. of all cases so treated are either entirely cured or else greatly relieved.

Dr. ROSS said that they were very much indebted to Dr. Stewart for bringing under their notice this form of treatment, which he believed Dr. Stewart was the first to use in this kind of disease. He had himself tried it unsuccessfully in a case of tetanus.

Dr. STEWART, in reply to Dr. Workman, stated that the value of nerve-stretching had been accidentally discovered by a medical man who had cured a patient suffering intense neuralgia by accidentally stretching the nerve.

Dr. PREVOST, Ottawa, read a paper on *Tumor of Bones of Skull Pressing on Brain*. There was an aperture in the frontal bone. The skin covering the tumor was of normal color. The patient's intellect did not appear to be much affected, but he seemed drowsy and dull. He walked slowly, and his memory was impaired. After entering hospital he gradually fell into a state of indifference, which was followed by coma and death. The autopsy shewed that the tumor originated in the bone. He exhibited the specimen.

Dr. CAMERON, Toronto, exhibited a boy who was being treated for pseudo-hypertrophic muscular paralysis. The treatment consisted of cod liver oil, syr. fer. iodid. arsenic and galvanism. The boy shewed the peculiarity of his movements in going up-stairs, and in rising off his back. He was stripped and examined by several of the members.

Dr. ROSS said that such cases are rare, and are to be found chiefly among boys.

Dr. CAMERON agreed with the views of Bristowe and Charcot as to the origin and nature of the disease.

Dr. SHEARD believed that in these cases the lesion originated in the anterior or motor nerves issuing from the spinal cord.

Dr. BLACK submitted notes of an autopsy on a case of echinococcus disease of the liver, exhibited the preparation in alcohol, and read the notes of the case.

Dr. OSLER, believed that the fatal termination in this case was due to suppuration of the cyst, which is one of the great dangers of the disease. He took out the specimen and demonstrated the ravages of

the disease. There had been a cyst in the spleen the size of a child's head, besides an enormous cyst in the liver.

Dr. H. P. WRIGHT, Ottawa, read a paper on *Phantom Pregnancy*. In the case reported the tumor was situated on the left side, and developed in such a way as to produce in the mind of the patient the idea of pregnancy. The movements of the tumor closely resembled those of a living fetus in utero. Chloroform was administered and the tumor disappeared, and the patient is now quite well, able to attend to her ordinary duties. Such cases are found chiefly among women subject to undue exertion, spinal irritability and menstrual irregularities.

Dr. SLOANE narrated a similar case.

Dr. ROSS stated that a case had come under his observation where a woman was convinced that she was carrying within her a dead extra-uterine fetus, and it was with great difficulty that she was persuaded to the contrary.

Dr. ELLIS described the chemical composition of milk of cows fed on distillery refuse. He had made an analysis of the milk of cows fed on different kinds of food. The mean of the solids in the milk of distillery cows he had found to be 14.64; of other cows 12.82. The amount of fat in distillery cow's milk is greater than in others, the minimum of the former being equal to the average of the latter. The caseine, sugar and ash ingredients are much the same in both. The principal difference is in the greater amount of fat in the milk of distillery cows. The distillery refuse on examination was found to consist of grain with the saccharine matter removed. The fat and albumen remained, together with a small quantity of alcohol, as small as distillers can make it. He could not say whether this food produced any morbid condition in the cows.

Dr. WORKMAN had heard that cows could not be kept long on this kind of food without degeneration.

Dr. SLAYTER, Halifax, communicated through the Secretary a paper on the *Advantages of Halifax as a Health Resort during the Summer Months*.

This concluded the business of the Section.

SURGICAL SECTION.

Dr. HINGSTON, Montreal, read a paper on *Certain Obstructions in the Air-passages*. This paper will be published in full in the next issue of the RECORD.

The paper was discussed by Drs. Major, Harrison, Fulton, Roddick and Wright.

Dr. FULTON, Toronto, read a paper on *Polypoid Fibroma of the Bladder in a Child*. He said that Cystotomy is the only rational mode of treating these growths, though a double-eyed catheter might be used in the case of small polypoid growths. A lengthy discussion ensued, which was participated in by Dr. Hingston and others.

Dr. RYERSON, Toronto, read a paper on *Polypus-Nasi*. He described the various modes of treatment, giving it as his opinion that removal by means of the snare is the most efficacious.

Dr. WALKER, Detroit, spoke on *Modern Lithotriety*, describing some cases in which he had used Bigelow's instrument with success.

Drs. HINGSTON and RODDICK took part in the discussion.

Dr. CAMERON, Toronto, exhibited a woman whose face was disfigured by an enormous tumor. When it first appeared, it was mistaken for an ordinary gum-boil. Her health does not seem to be much impaired.

Dr. FERGUSON, Toronto, reported three cases of *Eczema*, which he had treated successfully with *viola tricolor* internally and *quinine baths* locally.

Dr. REEVE, Toronto, read a paper on *Orbital Diseases*, dwelling specially upon the importance of an early recognition of such affections, and prompt operation for their removal. He exhibited specimens of tumors removed and photographs of cases.

Dr. GOODWILLIE, New York, read a paper on a *New Operation for Closure of Hare-lip and the Hard Palate immediately after Birth*. All that has been usually attempted in such cases has been to close the cleft lip only in childhood. His method is to operate immediately at birth, and close the cleft of the hard palate by forcing together the side bones of the mouth, saving all the hard and soft tissues, thus restoring the natural appearance. The nose, which is turned to one side in the disease, is straightened and the harelip closed. When the operation is completed, the external appearance of the nose, lip and mouth is natural.

Dr. FENWICK, Montreal, read a *Report on Additional Cases of Excision of the Knee*. He said that in excision of the knee in children, it is desirable to preserve the growing power of the limb. If the parts from which the bone grows could be pre-

served, the operation could be performed in young children with every prospect of a useful limb. He wished to call attention particularly to the possibility of forming a good union between the epiphyses of the bones. By rounding off the bones in sawing, future displacement is prevented. This method also produced the least possible amount of shortening. He shewed a specimen taken from a girl of 11 years whose knee joint he had excised, in which good bony union existed between the epiphyses of the bones. In his hospital practice he had had 26 cases; of these 22 recovered with useful limbs; in only 2 cases was subsequent amputation necessary. Two cases died subsequently, one on the 18th day after operation from pyæmia, the other died eleven months after operation from heart disease following an attack of acute rheumatism. After some discussion, the Section adjourned.

SEPTEMBER 8TH.

The Association reassembled at 10 A. M. Dr. Fenwick in the chair. After routine business,

Dr. WORTHINGTON, Clinton, read the report on *Climatology and Malarial Disease*. The Committee sent out a series of questions to medical men in various parts of the country, with the request that the answers be returned to the Committee to form the basis of their report. Thirty-seven circulars were sent to seventeen counties, and replies received from twelve medical men residing in ten different counties. In four of these no malaria was reported to have existed for many years, but in the remaining six it was said to be prevalent. In the malarial districts the answer was that it prevailed to an unlimited extent, and was termed the curse of the country. In the districts referred to the country around was reported to be flat, with sluggish streams whose beds and banks consisted of alluvium. The first effect of drainage and cultivation was to increase the evil, but it afterwards became the true remedy. Malarial poisoning seemed to be more active after the month of July until the cold weather. In the Lake Scugog district malaria prevailed to such an extent as to cause the people to request the attention of the Government to the matter. He described the different kinds of disease attributable to the malarial poison. To remedy the widespread evils of malaria he recommended thorough drainage of all swamps and receptacles of impurities. The cultivation of the soil does much to improve the sanitary condition of the country, and the growth of

the eucalyptus globulus has been found of great advantage in the marshy districts of the Southern States. He said that the subject deserved the consideration of the Provincial Board of Health, and it was a question whether the Government should not take action in cases where intervention was necessary on sanitary grounds.

Dr. McDONALD spoke of the eucalyptus globulus, and the merits and demerits of tree cultivation.

Dr. OSLER said that reports from the United States shewed malaria to be on the increase. In Montreal cases of ague have become more frequent.

Dr. FERGUSON referred to a case where the removal of a strip of woodland had been followed by the appearance of malaria where none had previously existed. In the County of Grey a tract of 200 acres of swampy land which had caused a great deal of malaria was cleared and put in grass. For ten years no ague was reported. The land was again broken up, and immediately after five cases of ague were reported.

Dr. RIDDEL said that forty or fifty years ago ague was prevalent in Toronto all along the front of the city. Wherever there were swamps, marshy lands, and rich grass there ague would be found. The products of decayed vegetation often ascended in the form of gas, and this created a new danger. In Toronto ague seemed to have been replaced by typhoid and other fevers.

Dr. OLDRIGHT was glad to see that this important matter was receiving so much attention. The Ontario Government had requested the Board of Health to enquire into the cause of malarial disease in certain districts. There was no doubt that these diseases were increasing in some districts, where dams and collections of decomposing sawdust were common. The disease was also on the increase in certain of the States, and commissions of enquiry were being instituted. In some of even the most elevated districts the disease was very rife.

Dr. WORKMAN enquired whether the malarial influences of the Don had received the consideration of the Board of Health, and whether the increase of disease there was due to the closing of the Lying-in Hospital.

Dr. OLDRIGHT said the closing of the hospital was a matter for which the Government was responsible, and the Board did not feel it their duty to interfere unasked.

Dr. WORTHINGTON stated that malaria was found in high as well as in low grounds, but the

cause, if traced, would always be found to be the decomposition of vegetable debris.

SANITARY STATISTICS.

Dr. CANNIFF submitted the following resolution from the Sanitary Committee:—That for the present the collection of sanitary statistics shall be confined to the cities and large towns of the Dominion, the results to be published monthly, and the deductions drawn therefrom to be circulated in the various centres specified. That a commission be appointed by the Dominion Government in order that by consultation and co-operation of the Local Government a common basis may be arrived at for carrying out such sanitary measures as may be necessary for the consent of the Dominion Government. The commission to consist of two or more medical men with a legal adviser.

Dr. FENWICK said it was important that there should be a committee in communication with the Government on the subject. He had spoken to Dr. Carpenter in regard to this matter, and had asked him if there were any means of getting statistics in England. Dr. Carpenter said there was not, the health and disease tables being based upon the mortuary returns. To get full statistics of disease was an undertaking that no Government in the world would attempt. He wished to bring out this point, and he hoped that the substance of the report would be sent to the Government as the official report emanating from the Association. (Applause.)

Dr. OLDRIGHT said the subject of the collection of statistics on disease was a new one. In their desire to get these statistics they had the strong support of the evidence of Dr. Lyon Playfair, who said that while the death statistics showed the wrecks which had been cast upon the shore, the statistics of disease served to give warning of impending storms. Disease statistics would show when a certain disease was threatening a district. Death statistics often gave the information too late. He would regret any resolution of the kind recommended by the committee. In Ontario the medical men applied to for these statistics had none of them made the excuse that they were too busy to get the information. There were many diseases which stopped short of death which it was desirable to check. In order to put restrictive regulations into force it would be necessary to get information at the time the disease was raging,

and not when it was too late to be remedied. He moved in amendment that the statistics be not confined to the towns and cities.

Dr. GRANT said that the Dominion Government had only granted \$10,000 for the whole of Canada, and it would be impossible to do more with that sum than was suggested by the committee. To pass the amendment would be to neutralize the whole action of the committee. The Government were anxious to do something, and what was proposed was merely an initiatory step. They could do no better for the present than collect the statistics from the older towns and cities. The system could be subsequently extended if found to work well.

Dr. FERGUSON said that there was no reason why the rural districts should be left out when Dominion money was to be spent. The cases in the country were just as interesting as those in the cities and towns. The scheme would never be a success except by taking in the whole Dominion and securing the sympathy of the whole profession.

Dr. FENWICK said that it would take \$5,000,000 to collect the statistics of the Dominion. If they thought the Government would appropriate such a sum they might pass the amendment. It was not that the country districts should be thrown out, but that they might have an opportunity of making a beginning.

Dr. GRANT pointed out that the rural districts had all towns in their midst, so that their interests would not be neglected. No slur was thrown upon the country practitioners.

The amendment was then put and lost by twelve to seven.

The motion was carried by fourteen to two.

On motion of Dr. CANNIFF, it was resolved that a copy of the report be transmitted to the Premier of the Dominion.

ELECTION OF OFFICERS.

The nominating Committee brought in a report recommending the election of the following officers for the ensuing year :—

President—Dr. Mullen, Hamilton.

Vice-Presidents for Ontario, Dr. Tye, Chatham ; for Quebec, Dr. Gibson, Cowansville ; for New Brunswick, Dr. Atherton, Fredericton ; for Nova Scotia, Dr. Jennings, Halifax ; for Manitoba, Dr. Kerr, Winnipeg.

General Secretary—Dr. Osler, Montreal.

Treasurer—Dr. Robillard, of Montreal.

Local Secretaries—For Ontario, Dr. Saunders, Kingston ; for Quebec, Dr. Brunelle, Montreal ; for New Brunswick, Dr. Coleman ; for Nova Scotia, Dr. Almon, jr. ; for Manitoba, Dr. Whiteford.

Committees—On Publication, Dr. Ross, Montreal ; Dr. J. H. Cameron, Dr. Fuller, of Toronto, the general secretary and the treasurer. On Therapeutics—Chairman, Dr. H. Punget. On Medicine—Chairman, Dr. Stewart, Brucefield. On Surgery—Dr. Gracett, Toronto ; Dr. Brunelle, Montreal. On Obstetrics—Chairman, Dr. Kennedy, Montreal. On Necrology—Dr. Fulton, Toronto ; Dr. Atherton, New Brunswick ; Dr. La Chappel, Montreal. On Climatology—Dr. La-roque, Dr. Botsford, St. John ; Dr. Worthington, Clinton ; Dr. Playter, Toronto. On Ethics—Drs. Gardner, Montreal ; Mawdsen, Quebec ; Bayard, St. John ; Parker, Halifax ; W. J. Almon, Halifax ; Steenes, St. John ; Beaudry, Montreal ; Chas. Morrison, London. On Arrangements—Drs. Sullivan, Saunders, Fenwick, Metcalf, and Sweetland. This portion of the report was adopted, and the elections confirmed by the Association.

The clause fixing the

NEXT PLACE OF MEETING

at Kingston gave rise to considerable discussion.

Dr. RODDICK moved, in amendment, that the next place of meeting be Montreal. He thought there should be a larger representation from Kingston before a meeting should be held there.

Dr. ADAM WRIGHT seconded the motion.

Dr. MACDONALD, in explanation of the finding of the Committee, said that their reason for choosing Kingston was to incite an interest in the Association among the medical profession there.

Dr. OSLER thought the place of meeting should be chosen quite independently of the number of members who happened to live there. He strongly approved of holding the meeting in Kingston.

The finding of the Committee was sustained by a vote of 18 to 15.

Resolutions were passed, tendering thanks to the Mayor and corporation of Toronto for the use of the City hall, to the medical profession of Toronto for their generous and hospitable reception of the members of the Association, to the managers and proprietors of railroads and steamboats for favors granted, and to Dr. Canniff for his exertions as chairman of the Committee of Arrangements.

On motion, the President left the chair, and Dr.

Mullen, of Hamilton, the newly-elected president, took the chair, and returned thanks for his election—an honor which he attributed rather to the desire of the Association to give all parts of the Dominion a fair share of the offices of the Association than to any personal merit.

Dr. GRANT, of Ottawa, moved a vote of thanks to the retiring President, which was seconded by Dr. Workman, and carried amid loud applause. Dr. Fenwick made an appropriate reply.

This closed a most successful meeting of the association. After the adjournment the members were entertained at the Asylum by Dr. Clark, the Medical Superintendent.

EXHIBIT OF MEDICINES AND INSTRUMENTS.

During the meetings of the Association the representatives of medicine manufacturers have displayed an excellent assortment of preparations, and have shown great willingness to submit them to the tests of the profession. Mr. H. P. Gisborne, of Toronto, exhibited specimens of lactopeptine and a large number of different preparations of maltine. Maltopepsyn was exhibited by H. Morse & Co.; and a very attractive display of surgical instruments was made by Messrs. Stevens & Sons, of Gower street, London, England.

PERSONAL.

Dr. William Young (C.M., M.D., Bishop's, 1878), who has been practicing in Hong Kong, China, has, owing to the climate not agreeing with him, returned to Canada and commenced practice in Montreal.

Dr. J. Leslie Foley (C.M., M.D., Bishop's College, 1880), having recovered from his severe illness, has resumed practice in Montreal.

Dr. Louis Ellsburg, of New York, who was in Montreal attending the meeting of the American Association for the Advancement of Science, favored us with a call.

Dr. Balcom (C.M., M.D., Bishop's, 1882) has settled in Moncton, N.B.

Dr. Morrell Mackenzie, of London, Eng., was in Montreal for a few days in August.

Dr. Bowditch, of Boston, was in Montreal attending the Science meeting.

Dr. J. G. Kittson (M.D., McGill, 1876,) lately

surgeon in the North West Mounted Police, has settled in St. Pauls, Minn., U.S.

Dr. R. J. B. Howard, B.A. (M.D., McGill, 1880) has passed his examination for the Licentiatehip of the Royal College of Physicians, London, and the Membership of the Royal College of Surgeons, England.

Dr. J. A. Grant, of Ottawa, was elected a Fellow of the Royal College of Physicians of London, on the 27th July.

Dr. Rottot, of Montreal, went to Europe the first week in September.

Dr. Fenwick, of Montreal, went to Europe by the Allan S.S. *Polynesian*, September 17th, in charge of one of his patients. He will return the end of October.

Dr. J. Leslie Foley, C.M., M.D. Bishop's, 1880, has been elected an Attending Physician to the Montreal Dispensary, in place of Dr. O. C. Edwards resigned.

MORTALITY OF MONTREAL FOR AUGUST.

Males.....190

Females.....208

Total.....398

Stillbirths..... 10

Mortality under 5 years of age.....240

Deaths from zymotic diseases were as follows:—

Small pox..... 0

Measles 0

Scarlatina..... 1

Diphtheria.. 3

Croup..... 5

Pertussis..... 1

Typhoid Fever..... 15

Other Fevers..... 1

Dysentery..... 9

Diarrhoea..... 65

Cholera Infantum..... 39

Other zymotic diseases..... 8

147

The diarrhoeal diseases have decreased; typhoid fever seems to be on the increase.

THE CANADA
MEDICAL RECORD,
A Monthly Journal of Medicine, Surgery and Pharmacy.

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No. 1 }

MONTREAL, OCTOBER, 1881.

{ \$2.00
Per Annum.

TROMMER EXTRACT OF MALT.

From the LONDON MEDICAL RECORD. March 15, 1879.

Trommer's Malt Extract is a preparation which has been received with considerable favor both in Germany and in America, and is now being introduced into this country. The malt extract of this kind of an unfermented preparation of malt, and containing carbo-hydrates, malt-sugar and dextrine, which take the place in therapeutics which has hitherto been essentially filled by cod-liver oil, while, from the fact that these carbo-hydrates are combined with diastase, with phosphates, and with the bitter principle of hop, it has many advantages over cod-liver oil in respect to its power of aiding digestion. Thus the preparation is not only in itself nutritive, but also tonic, and has the power of increasing the gastric secretion, and of rendering starch digestible through the medium of its diastase, which converts it into glucose. A great number of eminent practitioners abroad, including, in 1861, most of the leading teachers, speak of it in the highest terms, and independently of the obvious merit of its composition, there is in its favor a mass of clinical evidences, which should certainly secure for it an extensive trial in this country.

From the BRITISH MEDICAL JOURNAL, April 19, 1879.

This extract of malt has obtained a very large celebrity, and has come into very extensive use in the United States, where, indeed, it has become an article of almost daily use in professional practice. Malt extracts of the kind, consisting of the soluble constituents of barley malt, not fermented, appear to have considerable value in maintaining and strengthening nutrition. They are rich in malt sugar, dextrine and diastase. Hoppe-Seyler points out that, while the dextrine possesses the property of increasing the activity of the gastric secretion, and the diastase assists in converting starch into glucose and dextrine, the malt extract includes also a combination of malt sugar, alkalies and phosphates, which together make it a nutrient and medicinal agent of great value. There is, indeed, an accumulation of considerable clinical evidence that malt extract is capable of taking the place of cod-liver oil, to a large extent, in the treatment of phthisis and other wasting diseases. In Ziemssen's Cyclopaedia, vol. xvi, it is said to almost entirely have taken the place of cod-liver oil at the Basle Hospital, without any reason having been found as yet for returning to the latter remedy.

From the LONDON LANCET, January 25, 1879.

We find that this extract converts starch into glucose and dextrine rapidly and in large quantity. In flavor it is excellent, and we have, therefore, no hesitation in praising it highly. Malt extract seems to be steadily increasing in favor for diseases involving impaired nutrition; but its preparation requires great care, as it is easy in making it to destroy its activity as a starch-converter, and so render it nearly useless. The malt extract is supplied in various forms: for example, the simple, for nutrient purposes, with cod-liver oil (which it disguises pleasantly), with the hypo-phosphate, and with iron.

From the LONDON CHEMIST AND DRUGGIST, February 15, 1879.

Trommer's Extract of Malt is one of the best of the various preparations of a similar character. It is of the consistency of honey or treacle, and has a pleasant flavor, rendered slightly bitter by the addition of hop. Professor Redwood finds Trommer's Extract has all the power of acting on amylaceous bodies which diastase possesses, and considers the preparation has been made with great care and judgment.

The **TROMMER EXTRACT OF MALT COMPANY** is engaged exclusively in the manufacture of Malt Extract, "plain," and in such combinations as have been suggested and approved by some of the most eminent members of the Medical profession in both Europe and America. Notwithstanding the large demand, they maintain, by unremitting personal attention to all the details of manufacturing, the uniformity and excellent quality which have established the high reputation attained by their productions on both sides of the Atlantic.

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It differs in effect from all others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

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Its Curative Properties are largely attributable to Stimulant, Tonic and Nutritive qualities, whereby the various organic functions are recruited.

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A PHYSICIAN'S TESTIMONY.

A letter from one of the most eminent physicians in England, E. J. DAY, M.D., F.C.S., &c., has written the following letter to MR. FELLOWS:

DORCHESTER, DORSET, ENGLAND, October 22, 1880.

DEAR SIR:

Feeling it my duty to the medical profession, as well as to the public, to make known the effects of Syr. Hypophos. Co.: Fellows, I send you the results of my short but satisfactory experience. After using it in several pulmonary cases with good effect, I prescribed your Syrup for a middle-aged female patient, suffering from "melancholia," who was, up to the time she commenced taking it, so bad, that her friends and husband had made preliminary arrangements for her removal to an asylum; so great, however, was the improvement under the new treatment, which consisted solely in giving your Hypophosphites, that she shortly was able to attend properly to her household duties; it is only right to mention, that the drugs prescribed before, failed. Although your Syrup of Hypophosphites contains the active bitter tonics, with iron, etc., my young patients and invalids take the preparation readily. As a nervine tonic, I consider it ranks very highly, and is a valuable addition to the list of pharmaceutical preparations. I can, with great confidence, recommend it in cases of general debility; consequently, those gentlemen who dispense their own medicines should not be without it.

I am, sir, yours truly,

E. J. Day, F.C.S., M.R.C.S., L.S.A., M.M.P.A., R. & W. Medical Officer of Health, Public Analyst.
To MR. JAMES FELLOW, London.

Letter from D. J. WYBRANTS OLFERT'S, F.R.C.P.E., I.P.C.S., L.M., British Government Surgeon for L. M. & D. District.

ARMAGH, IRELAND, LURGAN, October 22, 1880.

MY DEAR SIR:

Having prescribed your Syrup of Hypophosphites in my practice, and having every reason to be satisfied with its good effects, I do not hesitate to say I consider it a very valuable and excellent addition to modern *materia medica*. It has been found in my hands particularly beneficial in cases of low nervous tone, and with those convalescing from debilitating ailments. Your Hypophosphites was first introduced to my notice by my friend, Dr. Killgariff, Surgeon to the Mater Misericordiae Hospital, Dublin. To avoid substitution in prescribing, I always write, Syr.: Hypophos.: Fellows: Comp.

Very faithfully yours,

J. WYBRANTS OLFERT'S.

To MR. FELLOWS, Snow Hill, London.

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In the various forms of Dyspepsia, resulting in impoverished blood and depraved nutrition, in convalescing from the Zymotic Fevers (Typhus, Typhoid, Diphtheria, Small Pox, Scarlatina, Measles), in nervous prostration from mental and physical exertion, dissipation and vicious habits, in chlorotic anæmic women, and in the strumous diathesis in adults and children, it is a combination of great efficacy and reliability, and, being acceptable to the most fastidious, it may be taken for an indefinite period without becoming repugnant to the patient.

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PHYSICIANS who have neglected to enroll their names on the Medical Register, are notified that they must conform to the law without delay, otherwise they will be prosecuted for the illegal practice of medicine.

Those who are in arrears to the College for their annual contribution are requested to be good enough to pay up as soon as possible in order to avoid the annoyance of a judicial collection.

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